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ABSTRACT

The role of differential values as they relate to educational achievement was investigated by examining school records of and administering the Rosenberg Self-Esteem Scale and questionnaires eliciting personal information, character trait preferences, and perceptions of self, ideal self, and others to 328 Indian and 271 non-Indian students from 7 rural North Dakota high schools. Also surveyed were 64 teachers. Findings supported notions of Indian educational underachievement, indicating that the values of Indian students, as a group, were quantifiably and qualitatively different from those of their teachers. Self-identity was different for Indian and non-Indian students. Comparisons between high and low achieving Indians showed that character trait preferences of high achievers were more closely aligned with those of their teachers than were those of low achievers. High achieving Indians valued the educational process to a greater degree than low achievers, ranked school-related character traits more favorably, expressed more positive attitudes toward their teachers, were less critical of non-Indians, and appeared to be less alienated from the non-Indian world while not rejecting their "Indianness." Neither high nor low achievers were more likely to participate in traditional Indian activities. Ideas regarding how schools serving Indians might achieve the goals of acculturation were presented. (Author/NEC)

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Values and Academic Achievement among Rural Indian High School Students in North Dakota

by
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Bachelor of Science, St. Cloud State University
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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

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Signature Janet Lee Clark

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ABSTRACT

Literature relating to American Indian formal education reveals that throughout much of history, the majority culture has stressed assimilation in the educational process. Indian students have been encouraged to give up their values and embrace the values of majority culture members. However, for the majority of Indian people, the goals of assimilation have not been realized. Indians have retained unique cultural values.

This study was designed to systematically investigate the role of differential values in the educational process of rural North Dakota Indian high school students. High school students and their teachers from seven schools were surveyed in group testing sessions. All subjects completed questionnaires eliciting personal information, character trait preferences, and percepticns of themselves, ideal self, and others. Students completed two additional self-esteem measures. Relevant information from school records was also utilized.

The results of the study support notions of Indian educational underachievement. Findings further indicate that the values of Indian students, as a group, were quantifiably and qualitatively different from those of their teachers. Self-esteem measurement results suggested that self-identity was different for Indian and non-Indian students.

Comparisons between high and low achieving Indians were made. It was discovered that character trait preferences of high achieving Indians were more closely aligned with those of their teachers than were character trait preferences of low achieving Indians. High achieving Indians valued the educational process to a greater degree than low achievers, and ranked school-related character traits more favorably. They expressed more positive attitudes towards their teachers, and were less critical of non-Indians. Their responses appeared to indicate that they were less alienated from the non-Indian world. However, high achievers did not appear to be rejecting their "Indianness." Neither high nor low achievers were more likely to participate in traditional Indian activities.

It was concluded that the findings support the benefits of acculturation as opposed to assimilation in the educational process. Through acculturation, individuals uniquely combine their heritage with new ideas and methods from an outside culture. A separate chapter presents innovative ideas from the literature, regarding how schools for Indian students might achieve the goals of acculturation.

Introduction

In 1969, the Senate Subcommittee on Indian Education reviewed the academic progress of American Indians. Citing such evidence as the high dropout rate, which is twice that of the national average, they concluded that the policies and programs for educating American Indians are a national tragedy. Other statistics appear to support this assessment. Indian students score "consistently lower than white children at every grade level, in both verbal and non-verbal skills according to national tests" (Cahn 1969, p. 28). Sixty percent of all Indian students do not graduate from high school. For those 40 percent who do graduate, the national achievement test mean score is at the 9.5 grade level (Heath 1971). On the average, Indians have less than half the level of schooling of non-Indians (Edington 1969). They have the highest illiteracy rate of any group in the United States (Cundick, Gottfredson & Willson 1974).

Statistically, Indians are among the poorest economically, the least employed, the unhealthiest, and the worst-housed of all ethnic groups (Dorris 1981; Stone 1964). Anderson and Cottingham (1981) reported a 53% employment figure for Native American males, compared to 62.8% for black males and 73.7% for white males. Havighurst (1970c,

pp. 3-4) suggested that one reason why Indian students perform more poorly in school is their lower socioeconomic level:

> Since most Indian children are raised in poor families, by parents who read little or not at all, and since most Indian children live in communities of poor people, we should expect them, like the children of poor whites or blacks, or Spanish-Americans, to do poorly in school, on the average.

He believed that if socioeconomic conditions improve for the American Indian, school performance would also increase.

However, Havighurst (1970a) also suggested that the American educational system may share part of the blame for the Indian student's low academic performance. He stated that an increase in school performance for the Indian student will result only "if the educational profession learns to teach Indian children more effectively and if the educational system supports such efforts" (Havighurst 1970a, p. 13). Crawford, Peterson and Wurr (1967, p. 1) asserted that many Indian students "experience the problems common to any children from poverty backgrounds but these same problems are complicated by . . . cultural differences."

Lack of knowledge of important cultural differences has frequently been cited as a major shortcoming of the educational profession in teaching American Indians (Baker 1970; Dozier 1971; Evans & Husband 1975; Gunsky 1971; Misiaszek 1969; Stone 1964; Zintz 1969). Cahn (1969, p. 30) stated that

> teachers who come to the reservation day schools often know little about the children they are go-

> ing to teach . . . Teacher orientation and training sessions pay scant attention to the Indian cultural values or to problems which the teacher may encounter with children who . . . have different values and know different experiences.

Zintz (1960a, 1960b), who studied Indian students in New Mexico public schools, felt that white teachers are aware of obvious differences in language, dress, and customs, but that they are not aware of the more subtle and intangible differences in values, attitudes, and feelings.

The highest drop-out rates among Indian students reportedly begin around the tenth grade (Burger 1968; Pepper 1976). Thus, formal Indian education is most apt to be terminated during the high school years. To prevent such drop-outs, many authors have stressed the importance of informing teachers of differences between themselves and their Indian students. They believe that if teachers become aware of these differences, they will be able to communicate more effectively with their students. Increased communication will theoretically lead to Indian educational advancement, rather than academic failure and drop-outs (Misiaszek 1969; Stone 1964; Zintz 1969). The next section will present three ways in which teachers may differ from Indian high school students.

Indian Students and their Teachers

Indian high school students are likely to be significantly different from their teachers in at least three major ways. These differences are apt to cause difficulties, both in the students' ability to understand their teachers and in the teachers' ability to understand the students.

First, Indian high school students are more likely to come from a lower socioeconomic background. Crawford, Peterson and Wurr (1967) summarized what they described as the typical middle-class attitude that many educators hold towards poverty-stricken students and their families:

> although we feel sorry for him, the poor person has somehow brought his ills upon himself . . . those who are chronically unemployed could really find work if they just wanted to. Further . . . those people who exist largely on public assistance ("welfare") are really playing a sort of "con" game on the rest of us taxpayers and are just too lazy or "good-for-nothing" to take care of themselves decently. (Crawford, Peterson & Wurr 1967, p. 8)

The fact that many students and their families receive money from the government may be a source of contention for some teachers, who may regard these payments as "federal handouts." However, in general, Indian people today do not receive federal money due to their racial status as Indians: the federal treaty agreements regarding monetary payments are no longer operative. Indians who receive federal monetary payments are either receiving social welfare, social security, or Veteran's payments which are not dependent on their status as Indians (Murray 1983; Schneider 1983).

The second major difference between Indian high school students and their teachers is that the students are adolescents. As such, the students are likely to feel some alienation from their adult teachers. Erickson (1968) spoke of adolescence as a time during which an "identity crisis" occurs. During the adolescent years, the individual's main task involves the process of identity formation. Significant others are likely to shift from parents and other adults, including teachers, to the peer group. As New (1970, p. 20) stated:

> the Indian youth shares in the general concerns of the typical American teen-ager; he wears mod clothes, does the latest dances, engages in TV hero worship, and is generally cognizant of the significant youth movements of search and protest. In short, he has all the problems common to the youth of his era, and in addition, the difficult problem of making a satisfactory psychological reconciliation between the mores of two cultures.

This latter difficulty - that of adjusting to two different cultures - is the third major difference between Indian high school students and their teachers. Cultural differences, including language barriers, have been called the greatest handicap to academic achievement (Zintz 1960a). And although the American Indian in our society shows varying degrees of assimilation and acculturation, Indian students are likely to hold traditional Indian values to some degree (Strauss 1972).

Since they are socially isolated from the larger society, many Indians living on reservations have successfully re-

tained a large portion of their traditional values (Carruthers 1952). Ablon (1964, p. 296) saw reservation life as kin-oriented and relatively closed to outside influences, emphasizing that reservations are "communities which have provided some degree of security and social control for the individual and have acted as buffers against the immediate encroachment of white culture." Even for those living off the reservation, a distinct value system has often been recognized (Archibald 1970; Beiser 1974; Cress & O'Donnell 1975; Lloyd 1961; Macgregor 1946; Misiaszek 1969).

Indian students also have extensive exposure to contemporary white values. Schools are probably the most important agency representing the broader American culture (Elkin 1960), and Indian students spend as much as one-third of their lives in school. Geographic mobility adds to the students' exposure to the majority culture; and if there is earned income in their homes, the employers are likely to be whites (James 1961). Indian students have exposure to the media, where portrayals of whites tend to be more positive than portrayals of Indians (Comstock & Cobbey 1979). Portrayals of Indians are apt to be derogatory: Wax and Buchanan (1975, p. 99) stated that the media presents the Indian as "perenially the villain and the loser . . . he is ever the obstacle to the settlement and growth of the nation . . ."

May and Dizmang (1974, p. 27) described the dilemma of Indian students:

> The values of Indian and white society are often viewed as opposites, creating a great deal of friction between proponents of each culture. The dominant Anglo-American ideas are generally stressed to Indian youth in the schools, through the mass media, and in virtually all contacts off the reservation. A strong pressure, both overt and covert, is placed on the American Indian to acculturate and become "more like everyone else in America." At the same time, pressure from the traditional culture urges him to "remain an Indian." Thus, the American Indian is caught between two different existences, and is somewhat marginal in each. Some persons are able to live with this or resolve it in various ways, while others find it a great problem.

When Indian children first enter school, they may be presented with the incongruity between their values and the values of their teachers (Roessel 1971). But as Wax, Wax and Dumont (1964, p. 59) stated,

> Many Indian children seem to accept these value judgements without becoming aware that they can be destructively applied to most of the members of the Reservation. When, in adolescence and early adulthood, they begin to put two and two together, their usual reaction is acute embarrassment.

Indian students may respond to the differing values of their teachers in three basic ways. Two of these ways will yield a value system more closely aligned with the value system of their teachers: accepting the new values while abandoning their own (assimilation), or attempting to reconcile the differences between their values and those of their teachers (acculturation).

Students may also rebel against their teachers' values, prefering to maintain their own values. Students may rebel by dropping out, skipping school, and/or by failing to acquire academic skills (Chadwick, Bahr & Strauss 1977; Davis & Pyatskowit 1976; Dozier 1971; McDonald 1973; Misiaszek 1969). The educational progress of these students may be jeopardized.

Teachers of Indian students have similar options in their response to Indian students. Teacher rebellion may be seen in negative expectations of Indian students, which may produce poor student achievement ("Baseline Data Study" 1970; Zintz 1969). An educational stalemate may ensue, with neither the students nor the teachers being able to relate to each other.

The present study was constructed to systematically investigate the value systems of Indian high school students and their teachers. It was expected that students whose values are more congruent with those of their teachers would be more successful in school tasks. They would receive higher grades from their teachers, and they would demonstrate higher achievement on standardized tests.

A review of the literature pertinent to the study will be presented in the following pages. Contributions from the anthropological, psychological, historical, sociological and educational literature on the subject of Indian values will be reviewed.

INDIAN VALUES IN EDUCATION

Values and Self-Concept: Definitions

According to the Merriam-Webster Dictionary (1974), a value may be defined as a quality or characteristic which is considered to be more or less desirable, important, useful, or estimable. Rokeach (1976, p. 24) elaborated on the concept of value, defining it as:

> a type of belief, centrally located within one's total belief system, about how one ought or ought not to behave, or about some end-state of existence worth or not worth attaining. Values are thus abstract ideals, positive or negative . . . representing a person's beliefs about ideal modes of conduct and ideal terminal goals.

In any individual's belief system, there are values which are held regarding what personal qualities and modes of behavior are preferable. These values serve as guidelines for the individual to assess himself or herself and others.

The definition which an individual gives to himself or herself may be termed self-concept (Beane & Lipka 1980). Rogers (1951, p. 36) described his view of the self-concept as follows:

> The self-concept or self-structure may be thought of as an organized configuration of perceptions of the self which are admissable to awareness. It is composed of such elements as the perception of one's characteristics and abilities, the percepts and concepts of the self in relation to others and to the environment, the value qualities which are perceived as having positive or negative valence.

This description emphasizes the importance of perception: a person may perceive with varying degrees of accuracy. But it is a person's perceptions which constitute his self-definition, or self-concept.

Lewis (1979) discussed the constructivist or developmental-cognition theoretical paradigm of self-concept. He stated that biological, social and cultural forces acting upon an individual are used by the individual to construct his world. In Lewis' view, the individual plays an active role in selecting, combining and interpreting himself or herself.

To determine whether or not an individual values the resultant self-definition, or self-concept, the concepts of self-esteem and the ideal self may be used. These concepts are discussed in the next section.

Self-Esteem and the Ideal Self

Norem-Hebeisen's (1976) review of the self-esteem literature revealed four major themes: basic acceptance, conditional acceptance, self-evaluation, and self-ideal congruence. Basic acceptance, a preverbal acceptance or rejection, theoretically originates in early childhood before a conceptualization of self has been developed. It has been associated with such things as autonomy, well-being, and freedom in relationships. Conditional acceptance depends upon standards which have been set by self and others,

and how well these standards are met. Self-evaluation is a comparative process through which a person compares himself or herself with others. Finally, there is self-ideal discrepancy, a process through which a person compares self-perceptions (self-concept) with perceptions of what an ideal person would be like (ideal self).

For the purposes of this study, self-ideal discrepancy will be used as the measure of self-esteem. Beane and Lipka's (1980) definition of self-esteem, as a valuing process which occurs after a person's self-concept has been formulated, will be used. Thus, basic acceptance, since it occurs before the formulation of a self-concept, will not be considered.

Self-esteem will be used to refer to the positive or negative judgements that individuals make regarding personal satisfaction with their perceived self-concepts. As Beane and Lipka (1980) stated, the importance of values cannot be overemphasized in this process. For example, some pupils may describe themselves as poor students (self-concept), but they may still have high self-esteem if academics are considered to be unimportant. To the extent that these pupils value being good students, however, their self-esteem will be lowered by their self-definitions.

Ideal self represents an individual's conceptions of the qualities which constitute a "good" person. Rogers (1959, p. 200) defined the ideal self as "the self concept which

the individual would most like to possess, upon which he places the highest value for himself." Bills, Vance and McLean (1951, p. 257) equated ideal self with value system:

> Being a particular kind of person, for example, being academic, is a value if possessing it causes the individual to feel he is a better person in his own eyes. Thus, traits are examined in light of our philosophy of life and become values or are rejected in accordance with our value system or philosophy. The philosophy of life, the value system of the individual, and the concept of the ideal self are synonymous.

Since ideal self reflects preferred personal values, it is important to consider how values arise. The next section will address this issue.

The Origin of Values

Values are not intrinsic, but are learned through an individual's interactions with significant others (Beane & Lipka 1980). As they grow up, children learn to value those things which their parents and other significant figures promote. By the age of five, children already have some clear beliefs about preferred characteristics and interpersonal modes of behavior (Misiaszek 1969).

The values which children learn will not only reflect the values of their parents, but those of the larger society or culture in which they live. Culture itself refers to

> an abstraction from the body of learned behaviour which a group of people who share the same tradition transmit entire to their children, and, in part, to adult immigrants who become members of the society. It covers not only the arts and sciences, religions and philosophies, to which the word "culture" has historically been applied, but

> also the system of technology, the political practices, the small intimate habits of daily life, such as the way of preparing or eating food, or of hushing a child to sleep, as well as the method of electing a prime minister or changing the constitution. (Mead 1955, pp. 12-13)

Different cultural systems give rise to different values, many of them reflecting the existing life style of the people and fostering preservation of the culture as a whole. Included in every society's values are cultural definitions of an "ideal person." Thus, "self-esteem may be partially a function of the extent to which children live up to cultural norms" (Kagan & Knight 1979, p. 458). To illustrate this point, two examples by Inkeles (1956), regarding two different tribes of American Indians, follow:

> In the case of the Pueblo society . . . the dependence upon water control as a means to survival under extremely adverse agricultural conditions requires extensive cooperation among adult males in the fields, in the preparation and maintenance of irrigation facilities, in the construction of houses, etc. Under these conditions, it is the "deeply disciplined" man - either not characterized by, or able to suppress initiative, ambition, and intense personal loyalties - who is essential to the effective functioning of Hopi and Zuni society. As is to be expected, this personality type represents both the social ideal, and apparently the actual statistical norm in the Pueblo populations. (Inkeles 1956, p. 584)

> Yorok-Hupa society is characterized by concern with property, money and wealth; an open-class system in which mobility is emphasized and power and prestige are intimately linked with the possession of goods; and an ethical system emphasizing a moral demand for work and the pursuit of wealth, for self-denial, and for individual responsibility . . . these structural features (reward) competitiveness, loneliness, and penuriousness - to such an extent that they come to dominate the social scene and to be transmitted from parents to children. (Inkeles 1956, p. 585)

As can be seen by the foregoing examples, different Indian tribes have their own unique cultural life style, and there may be vast differences between the life styles of any two tribes. Wax and Buchanan (1975, p. 1) asserted that the term "Indian" is a misnomer, and was not used prior to the advent of Europeans.

> The natives of the Americas had not identified themselves as a single people by whatever name. Rather, they had thought of themselves as members either of small bands of kith and kin or of somewhat larger tribal and linguistic units. In time, the diversity was recognized and names such as Apache, Pequot, Texocan, Natchex, Tlaxceltec, and Eskimos entered the vocabulary of the Europeans and white Americans. Nevertheless, the misleading label of "Indian" did adhere and was stretched to fit all the natives of the Americas. Thus, by virtue of their relationship to the white invaders, the natives of the Americas found themselves classified under the single label of Indian (Indio).

Numerous anthropologists, educators and researchers have attributed characteristics to Indian people in general, using such terms as "basic qualities of Indianness" (Ablon 1964, p. 303) or "the Indian value system" (New 1970, p. 16). Because the same generalizations have been noted by many different authors, they appear to have consensual validity, serving as a means to conceptualize differences between Indians and whites.

The values of present-day Indians must not be confused with those of aboriginal Indians:

> The Indian culture that exists on the reservations and in present-day Indian communities is a rough facsimile of an aboriginal way of life that was destroyed. (Robbins 1974, p. 97)

Some of the present-day Indian values may be a product of recent conditions, and not the product of the unique cultural systems which existed in former times (James 1954).

Nevertheless, some current Indian values appear to be the product of past tribal living. Thus,

> A true knowledge of the composition of the Indian gestalt can only be acquired by a deliberate and objective study of every facet of past and present Indian culture and the value systems that contributed to a compatible way of tribal life. Only by a study of the integral components of the universals of the societies of man can an overall picture of the aboriginal way of life be reconstructed, and this will clarify the innate qualities of the Indian customs and values that were so vital in the social, political, and economic aspects of tribal existence. (Robbins 1974, p. 102)

In the next section, some perceptions of present-day Indians will be organized around the concept of the traditional man, as presented by Eliade (1971).

Traditional Indian Values: The Traditional Man

The writings of Eliade (1971) may be utilized to organize some perceptions of present-day Indian values. Among these perceptions are present-orientation, lack of time consciousness, respect for elders, and harmony with nature.

Eliade explored traditional people from many different societies, and from ancient to present times. He attempted to discover their likenesses across cultures, as well as their differences with so-called "modern" people. He asserted that the major difference between traditional and non-traditional people lies in a differing conception of reality.

Eliade's traditional man is a spiritual being who lives through an oral tradition, through which he tells stories of ancestors and heroes. For the traditional man, all human acts acquire their meaning as they echo mythical prototypes. Eliade often used the term "in illo tempore" (meaning in the age of the gods) to signify the goal of the traditional man: to function as did the gods, ancestors, or heroes. As Eliade (1971, p. 5) stated, the traditional man "acknowledges no act which has not been previously posited and lived by someone else, some other being who was not a man. What he does has been done before. His life is the ceaseless repetition of gestures initiated by others." For such a man, progress is a meaningless word, because it is inconceivable.

Wax and Buchanan (1975) appeared to echo Eliade's assertions. They caught the spirit of the traditional man in reservation Indians:

> Observing rural Indians, many whites judge them by whether or to what degree they are "making progress." Such observers see Indian reservations as being composed of "progressives" (who are making progress) and conservatives (who are resisting it). This judgement comes easily to men who conceive of themselves as being better - or better off - than were their parents and forebears. Seeing so little of value in their own ancestral past, they are impatient with Indians who find meaning and value in theirs, and they cannot comprehend that in North America and elsewhere are many folk who think that the best they could or should do is to be as wise and good as were their fathers and grandfathers. For such people, "progress" is illusory or superficial, or at most a matter of the convenience of an automobile as compared to the back of a horse. (Wax & Buchanan 1975, p. 97)

Other writers who have emphasized the prime importance of tradition in the Indian value system are Brophy and Aberle (1966), Hynd and Garcia (1979), Misiaszek (1969), and Moore (1982). The ways of the past are taught through legends and myths, the so-called "oral tradition" (Coleman 1962; Johnston 1976; Misiaszek 1969; Moore 1982). Elders are respected (Archibald 1970; Brophy & Aberle 1966; Moore 1982; Roessel 1971): the traditional Indian sees no greater wisdom or knowledge than that of his elders.

Eliade (1971) further emphasized the importance of rituals as a way of recreating sacred time, "in illo tempore." For the traditional man,

> every act which has a definite meaning - hunting, fishing, agriculture, games, conflicts, sexuality - in some way participates in the sacred . . . the only profane activities are those which have no mythical meaning, that is, which lack exemplary models. Thus we may say that every responsible activity in pursuit of a definite is . . . a ritual. (Eliade 1971, p. 28)

For the traditional man, acts and objects exist only as they repeat mythical beginnings. Speaking of the Indian, Simon (1974) pointed to the tendency to anthropomorphize and the importance of symbolism. She used the term "whispered religion" to express the underground current of native spiritual thought, which she claimed is still present. Bryde (1971), Dart (1981) and Moore (1982) also spoke of spiritualism as a constant reality and a way of life for traditional Indian people.

A widely held observation about Indians is that their conception of time is somehow different than that of majority culture members. Indians have been said to lack time consciousness (Polacca 1962); they attend to the concrete realities of the present, instead of making long-range goals 'Spindler & Spindler 1957); their life-style, in general, is unhurried and oriented towards the present (Bryde 1971; Hynd & Garcia 1979). For the Indian, time is a motionless and boundless element (Szasz 1974). The Indian, as a traditional man, is not interested in the future because he does not concede progress. Eliade stated that the traditional man does not recognize history, and does not accept himself as a historical man. He uses symbols, myths, and rites instead of the written word. He seeks to abolish time through repetetive rites and through living as his ancenstors did, "in illo tempore." The traditional man is saying, in effect:

> "If we pay no attention to it, time does not exist; furthermore, where it becomes perceptible - because of man's 'sins', i.e., when man departs from the archetype and falls into duration - time can be annulled." Basically, if viewed in its proper perspective, the life of archaic man (a life reduced to the repetition of archetypal acts, that is, to categories and not to events, to the unceasing rehearsal of the same primordial myths), although it takes place in time, does not bear the burden of time, does not record time's irreversibility; in other words, completely ignores what is especially characteristic and decisive in a consciousness of time . . . (He) lives in a continual present. (Eliade 1971, p. 86)

For the traditional man, time is cyclical and periodically regenerates itself. In contrast, the modern man sees time

as linear. That is, modern man sees time as a progression of events leading towards changes and new developments. This contrasting view of reality seems to have negatively influenced the European's perception of Indians from earliest contacts. For instance, Franklin (1981) believed that Indians were initially considered inferior because they had failed to develop the country.

The Indian's failure to develop the country raises another point about differences between traditional and non-traditional people. Eliade (1971, p. 95) saw traditional man as living "in harmony with the cosmic rhythms; we could even say that he entered into these rhythms (we need only remember how 'real' night and day are to him, and the seasons, the cycles of the moon, the solstices)." New (1970, p. 16) stated, "The Indian value system always has been centered on the idea that man should seek to blend his existence with the comparatively passive rhythms of nature, as opposed to the dominant society's quest for control of nature through scientific manipulation of his elements." Archibald (1970), Berg (1982), Misiaszek (1969) and Roessel (1971) also saw Indians as living in harmony with nature, instead of attempting to change or modify nature for their personal gain.

In summary, traditional Indians see themselves as living in harmony with nature, repeating mythical prototypes. They are concerned with the present, concrete realities of life;

they respect the wishes of their elders, including their ancestors; their life-style is unhurried, with an overriding emphasis on tradition. Religion is an ever-present reality which colors their world; religion serves to define the spectacles through which they see their world. The next section will elaborate on the concept of the traditional Indian value system through a description of common behaviors and preferences which have been observed in Indian people across tribal systems.

Traditional Indian Values: Common Behaviors

In the last section, it was noted that traditional Indians share certain conceptions of reality. It has also been said that different Indian tribal groups tend to behave in similar ways across groups, as a reflection of commonly held values (Dozier 1971; Roessel 1971).

One postulate that appears frequently in the literature is that there are differences in child-rearing practices between Indians and non-Indians. The traditional Indian pattern of child rearing has been variously termed "unstructured" (Hynd & Garcia 1979; Wax & Thomas 1961) or "permissive" (Densmore 1970; Dozier 1971; Witt 1980). Parental behavior reflects respect for individual autonomy, individual differences and individual freedom, identified by Brophy and Aberle (1966), Bryde (1971) and Spindler and Spindler (1957) as traditional Indian values.

Hynd and Garcia (1979) stated that children are given as much respect as adults in traditional Indian society. Pelletier (1970) said that Indian children are not put on a feeding schedule, but are fed when they are hungry. Likewise, she perceived Indian children as being given whatever they want, so that they are never in a state of need. They are picked up whether or not their hands are dirty or their clothes are clean. Furthermore, "they are allowed to do pretty well as they wish - to explore, discover for themselves, on their own terms their own feelings and in their own way, by making decisions by themselves" (Pelletier 1970, p. 3). It is apparent that this method of child-rearing would produce a child who pays less attention to middle-class white standards of cleanliness and neatness (Burger 1968).

Traditional Indian adults punish younger children by ignoring incorrect behaviors or by using shame. Older children may be ridiculed (Wax & Thomas 1961; Witt 1980). Pelletier (1970) claimed that there is no child abuse among traditional Indians. Witt (1980) also asserted that there is no harsh physical or mental punishment of Indian children.

Although there is little physical abuse of children among Indian parents, there appears to be a certain amount of child neglect, i.e., "deprivation of food, clothing, shelter, and parental love and attention" (Bank Street College

of Education 1976, p. 73). It is uncertain whether child neglect existed in pre-Columbian Indian societies. However, poor parenting probably was more likely to have taken this form, since neglect is more congruent with traditional values.

Child neglect among Indians reportedly has been growing in recent years. Alcohol abuse and the weakening of the extended family have been cited as causative factors (Bank Street College of Education 1976). Among adolescents, neglect can be seen

> when parents or other adults in effect opt out of the parenting role. A number of (Indian) people we spoke to were concerned about adolescents: parents don't know how to handle them, are afraid of them, feel overwhelmed by them, and don't give them any guidance or advice. Ambivalent feelings and a certain amount of friction between adolescents and parents are pretty much the norm in American society, where adolescence is a notoriously stormy time of life. The situation may be even more complicated in Native American culture, however . . . There are different opinions between generations about where young people should go to high school, whether close to home or to distant boarding schools. Such intergenerational frictions are likely to be exacerbated in times of social change. In addition, so many Indian and Eskimo parents spent their own adolescent years away from home in boarding schools, that they may have no model of family life, no personal experience to draw on in developing relationships with their own adolescents. (Bank Street College of Education 1976, p. 73)

Many observers have noted a strong group orientation among traditional Indians, seen through a focus on cooperation, sharing, and generosity (Archibald 1970; Havighurst 1957; Hynd & Garcia 1979; Misiaszek 1969; Turosak 1981).

Ablon (1964, p. 297), who spent eighteen months among urban Indians representing 17 tribes, observed:

> In general, all Indians . . . tend to feel the responsibility of helping their kinsmen or tribesmen when asked, and will give money, food, or lodging to a needy family. The flexibility of the Indian household often seems to be infinite, and most Indians assume that there is always room for five or six additional persons at their table or for lodging, no matter how small the actual living quarters may be.

It has been stated that in Indian society, an individual is more likely to be judged by his contributions to the group than by individual achievements (Bryde 1971; Hynd & Garcia 1979; Pepper 1976). Among traditional Indians, the tribe is like an extended family (Misiaszek 1969); getting along with and working for the group is of primary importance (Bryde 1971).

Brophy and Aberle (1966) believed that the strong group orientation of traditional Indians tends to deter pride in material possessions. They claimed that this is one reason why Indian values usually do not include the amassing of wealth. White middle-class values towards property may not be upheld. In fact, traditional Indians may show little respect for property, either their own or someone else's (Burger 1968).

Although there is "a high degree of control over personal aggression within the in-group", there is also "a positive valuation of bravery and courage . . . with respect to emphasis on highly aggressive daring in military exploit"

(Spindler & Spindler 1957, p. 149). Gray (1968, p. 474), in discussing the role of Indian Scouts in the military from 1866-1915, stated, "the Enlisted Indian Scouts served not only well, bravely, and honorably, but beyond the call of duty." Hoffman (1969, p. 12) noted, "In both world wars, Indians served in greater proportions than their numbers. They didn't have to be drafted; they volunteered." Veterans are reportedly treated with a great deal of respect in their communities (Cash 1971). In their studies of Sioux adolescents and their communities, Wax, Wax and Dumont (1964, p. 54) stated:

> There are situations in which rivalry holds full sway. Usually these involve contacts between the folk of the community and some other group who are or can be regarded as outsiders. Thus the youthful Sioux are transfigured when they are matched with outsiders in basketball tournaments or dancing contests.

When in conflict with an outside group, individuals who are able to endure pain, hardship, hunger and frustration with a quiet dignity are greatly admired (Archibald 1970; Misiaszek 1969; Spindler & Spindler 1957).

Indians across tribes may have some common behavior patterns which arise from shared values. However, shared values may give rise to widely discrepant behavior patterns between tribes, due to the unique cultural setting which each tribe maintains. Spindler and Spindler (1957) illustrated this point clearly in the following excerpt. Noting that Indian cultures value control of aggression, they described how different tribes achieved this objective:

> On the Plains, for example, out-group aggression is highly channelized -among tribes like the Comanche, Sioux, Arapaho, Crow - by raids on other tribes for horses, scalps, and booty and with systems of status based on one's daring in these exploits. And here also in many tribes, in-group aggression is highly channelized - in legitimatized wife stealing by certain men's societies, highly aggressive sexual conquest with males "counting coup" on women in some tribes, very rough institutionalized practical joking on relatives and old people, and ritualized boasting about military, and frequently sexual, exploits. (Spindler & Spindler 1957, p. 149)

> Among the Algonquians of the Northeastern Woodlands - the Ojibwa of Ontario and Wisconsin, the Menominee, the Naskapi of Labrador - there are fewer outlets for the expression of aggression on out-groups. Only some of the southern tribes tortured prisoners of war as a public spectacle, or even had formal warfare. The primary outlet for aggression seems to have been, and still is among the least acculturated groups within tribes, witchcraft - just as it is, coupled with gossip, among the Pueblo peoples like the Hopi and Zuni of the Southwest. (Spindler & Spindler 1957, p. 149).

Even among Indians who share the same tribal name, factors such such as geographic location may produce different personality attributes. For example, James (1954) contrasted the northern Chippewa with the Chippewa of Michigan, Wisconsin and Minnesota. He noted that cultural values of self-reliance, self-dependence and self-control were maintained by the northern Chippewa, due to the scarcity of wild food and game. However, among the southern Chippewa, food was more abundant. Also, the need to band together against their enemies placed an emphasis on cooperation, so that cooperation rather than self-reliance was valued.

Finally, an awareness of individual differences within any cultural group should be maintained. Characteristics commonly attributed to Indians are "in no sense fixed psychological traits" for all Indians (Spindler & Spindler 1957, p. 149). As Banks (1977, p. 322) expressed,

> the different experiences of individuals are real and mediate against rigid generalizations. So while generalizations may provide a useful perspective for interacting with individuals, allowances must be made for variations by individuals within the group.

The last two sections have focused on traditional Indian values as they have been viewed in the anthropological literature. The next section will review the empirical literature in an attempt to determine if these perceptions have been confirmed through scientific investigation.

Traditional Indian Values: Empirical Studies

There is not a large number of systematic studies of Indian value systems. However, the few studies which could be found appear to provide empirical evidence for some of the forementioned conclusions regarding the differences between traditional Indian values and those of the majority culture.

A survey by Reid and Sparks (1976), conducted on the Red Lake Chippewa Reservation, compared responses of 66 parents of high school students and 66 teachers and administrators. The teacher group was predominantly composed of members of the majority culture. One of the statistically significant findings of the study was that Indian parents preferred that

schools emphasize cooperation, while teachers preferred both cooperation and competition. A preference for cooperation has been previously identified as a traditional value among some Indian groups.

Helper and Garfield (1965) found a strong group orientation among American Indians whom they tested. Their subjects consisted of freshman and senior Indian students at Flandreau Indian School in South Dakota, and white students from a nearby public high school. The responses of 101 Indian boys and 131 Indian girls were contrasted with a white comparison group of 62 boys and 61 girls. Using ten semantic differential scales, the students were asked to rate concepts, including INDIAN, WHITE PERSON, ME, and ME AS I WANT TO BE. The Iowa Test of Educational Development served as the measure of acculturation.

The results of the study revealed that each race rated their own label more positively than did the other race. However, the Indian students rated the concept INDIAN more highly than the concept ME, in contrast to the white students, who did not rate their racial group higher than themselves. Helper and Garfield (1965, p. 822) concluded:

> Indians thus appear to see their racial group as more valuable than themselves as individuals . . . These results suggest that the concept INDIAN is more highly salient and more highly valued in Indian youth than WHITE PERSON is in whites.

Potential confounding factors in this study, as in most studies which have been conducted with Indian students, are

socioeconomic status and effects of prejudice and discrimination by the majority culture. Since Indian students generally emerge from a lower socioeconomic level, it is difficult to determine whether differences are due to traditional Indian values or the effects of living in poverty. In addition, perceived discrimination may result in a heightened valuation of the group. Supporting this latter statement are studies by Dion, Earn and Yee (1978) and Rollins (1973). Dion, Earn and Yee (1978) reported on a series of studies which they had conducted with blacks, Jews, women, and Chinese. They noted that perceived discrimination often results either in a heightened personal identification with the positive aspects of one's membership group, or the denial of negative features attributed by members of the majority culture. Rollins (1973), who studied 120 female undergraduate college students from seven ethnic groups, found that subjects who were members of ethnic groups towards whom there was greater social distance identified more with their group. Thus, the Indian strong group orientation may be as much a product of present social conditions as of traditional values.

Ahler (1974) provided further evidence that preferences for cooperation and a strong group orientation differentiate Indian from non-Indian students. In addition, she found evidence for the traditional Indian preference for military exploits. She studied 101 Indian students and 133 white

students in North Dakota. Among the Indians, there were 20 members of the Chippewa tribe and 81 Devils Lake Sioux Indians.

Each Indian student was interviewed privately, in a ten to fifteen minute session. Using a standard set of interview questions, Ahler assessed Indian student participation in traditional activities such as powwows, eating traditional foods, and Native religions. Dichotomous scores were assigned to students for each activity, and the scores were summed. Based on these scores, the Indian students were divided into "traditional" or "acculturated" groups. This scoring system included the assumption that all of the questions were of equal importance in determining traditionalism. However, participation in certain activities may be more salient in the determination of traditionalism.

Ahler constructed a semantic differential, using twenty concepts taken from a survey of Social Science textbooks. These concepts included: AMERICAN INDIAN, TRIBE, COMPETITION, and WAR. Ahler administered the semantic differential to all the students. No significant differences were found between the ratings of traditional and acculturated Indian students. However, nine concepts were significantly different for white students and acculturated Indian students, and twelve concepts were significantly different for white students and traditional Indian students.

Among the findings, Indian students responded more favorably towards the concepts of AMERICAN INDIAN and TRIBE, and white students were more favorably inclined towards COMPETITION. Traditional Indian students reported a more favorable attitude towards WAR than did the white students. Ahler explained this latter finding by noting that war was a major vehicle towards achieving positions in society in former times, and that war honors are prized even today by Plains Indians. She concluded:

> The American Indian high school students tend to associate more favorable feelings with those concepts which have a basis in their own culture. Conversely, their feelings are significantly less favorable toward those concepts based primarily in the white American culture which have adversely affected the Indian culture and life style. (Ahler 1974, p. 112)

In another study, the Indian concept of time was explored. As previously noted, traditional Indians have been described as lacking a consciousness of time. Anderson, Burd, Dodd and Kelker (1980) compared 63 Indian adolescents from three Montana reservations with 179 non-Indian adolescents from several Montana communities. Two tasks were presented to the students in cartoon form: building a canoe, and raising corn. The students were given forced-choice responses, in which they were asked to indicate whether the tasks would take hours, days, months, or years. Indian students in the 14 and 15-year-old age groups were significantly less accurate in predicting length of time than their non-Indian peers. There were no significant differences be-

tween Indian and non-Indian 16 and 17-year-olds. It may be hypothesized that the lack of significant differences among higher age groups was partially due to the effect of drop-outs. Perhaps those Indian students who would be less successful with this task (thus, more traditional) had left the school system.

An earlier study also provided evidence for a different time orientation among Indian students. Klineberg (1928) tested 120 Yakima Indian students and 110 white students who ranged from 7 to 16 years of age. The students attended the same school for the most part, and reportedly emerged from similar socioeconomic backgrounds. The Mare and Foal, Casuist Form Board, Healey, Triangle, and Knox Cube tests were administered. Klineberg reported that, on all tests, the white students were faster, but the Indian students made fewer errors. For example, on the Mare and Foal test the white students averaged 29 seconds with two errors, whereas the Indian students averaged 33 seconds with one error. Klineberg interpreted his data as revealing cultural differences: white students are used to fast-paced lives, whereas Indian students tend to take their time.

A study by Evvard (1966), who was not directly addressing the Indian conception of time, is also relevant. An interesting difference in test performance of Indian children under two conditions was attributed to the value difference on time. Two examiners tested 58 Navajo children from the be-

ginner's, first and second grades at a reservation boarding school in Arizona. The testing instrument was the Bender Gestalt Visual Motor Test. One examiner was white, and one examiner was Navajo.

Children tested by both examiners produced mean scores and standard deviations comparable to those achieved in the white standardization samples. However, those tested by the Indian examiner tended to take more time with the task. Evaard believed that, even at this early age, students may be aware of differences between their culture and white culture regarding useage of time.

Although the Indian students' awareness is one possible explanation for the differing performance under the two examiners, variable performance does not necessarily suggest a conscious awareness. Indian students may have been unconsciously responding to the stimulus value of a white or Indian examiner. It is also possible that the examiners varied in their approaches. The Bender Gestalt administration does not impose time limits; however, the white examiner may have subtly encouraged faster completion, or the Indian examiner may have appeared less time conscious. Nevertheless, this study clearly demonstrates that Indian students are able to manage and use time in a similar manner as members of the majority culture. The study also demonstrates that time useage may be different when no members of the majority culture are present.

A study by Caudill (1949) provides evidence for two of the commonly mentioned Indian attributes: desire to live a traditional life (non-progress-oriented), and emphasis on accurate observations and descriptions. Test instruments consisted of the Rorschach Inkblots and ten cards from the Murray Thematic Apperception Test (TAT). The subject pool consisted of 99 Ojibwa students from Northern Wisconsin, who represented 39 percent of the school population on a particular reservation. An equal number of male and female students were tested. Findings included an emphasis on accurate observations and descriptions of the TAT cards, and what was described as "a lack of ambition" in story content (Caudill 1949, p. 424). By "lack of ambition", Caudill was referring to the results he obtained when he applied Murray's need for achievement scoring formula. The Indian students' stories did not generally include the desire to achieve progress. In contrast, norms established on a majority population included an orientation towards progress. This difference may represent a differing value on progress. It is uncertain to what extent socioeconomic variables determined outcome, as most of the students were reportedly poverty-stricken.

Strauss (1972) compared 400 urban Indians and 300 urban whites in Seattle, Washington, using a modernization scale which he developed. The Indian sample contained significantly more females, and the white sample tended to have

more education, higher income, and higher occupational status. All of these factors are potentially confounding variables. One significant finding occured on responses to a statement which read, "One of the major problems in America today is that older people won't listen to new ideas presented by the young people for changes that are badly needed." The urban whites and Indians were significantly discrepant in their responses to this statement, with Indians more frequently noting disagreeement. Strauss believed that this was due to the Indian's traditional respect for elders. Another possible explanation would be the Indian's lack of progress orientation, as was noted in the previous study.

Another study conducted at the Red Lake Indian Reservation in Minnesota (Sullivan 1979) explored the differential value systems of Indian students and their teachers through self-concept measurement. Fifteen non-Indian teachers and 251 third through sixth grade Indian students were asked to rate an "ideal student", responding to statements from the Piers-Harris Children's Self-Concept Scale. A significant difference between teachers and students occurred in their reactions to a statement which read, "An ideal student would be different from others." Indian students affirmed this statement more frequently than their teachers. This finding may be due to the Indian people's respect for individual differences, in contrast to the white struggle for homogeneity.

This section has presented a brief review of empirical studies conducted with Indian populations. These studies have all provided evidence for the notion that some traditional Indian values are qualitatively and quantifiably different from the values of the majority culture. The next section will focus on classroom observations.

Traditional Indian Values in the Classroom

Several authors have written about how traditional Indian values may be observed in the classroom. Many of these authors state that different values result in classroom behaviors which are often perceived as misbehaviors by non-Indian teachers. Because they do not understand the context from which the behaviors have emerged, teachers may respond with disciplinary action (Albert & Triandis 1979).

Cazden and John (1971) noted that Indian students' time concept and their unhurried view of the cosmos is apt to cause problems in a typical middle-class school. The time concept may result in lowered attendance, particularly where school busses run on certain schedules. Teachers' schedules may be difficult to implement: Indian students may pause to doodle or daydream, since time does not have a similar meaning for them. Timed tests may not show accurate results. In addition, Indian students, who live in the present, may be less inclined to delay gratification, but may respond more favorably to immediate rewards for their performance.

These authors also remarked that the Indian attitude towards nature may make students antipathetic towards the white person's view of science and attempts to change nature. Indian students may be opposed to classification systems, which counter the "mystical Indian view of nature as an infinitely complex web of life forces, an organic web that makes room for rocks, clouds, and mountains as well as plants, people, and other animals" (Hadlock 1973, p. 10). Moreover, the Indians' religion may emphasize literal interpretations. For example, Indian students may believe that witches bring sickness, and as a result they may not comprehend the scientific method (Zintz 1960a).

Driver (1979) presented some specific suggestions for science teachers, to enable them to teach students from a more traditional culture. He suggested that teachers must first learn the ideas and beliefs their students possess about the world and the way it operates. Taking the students' world as a starting point, teachers would then attempt to provide learning situations involving student participation. Instead of passively learning facts which may be difficult to reconcile with previous belief systems, students might be encouraged to actively interact with man-made and living systems. Subsequent verbalizations about their experiences would permit students to comprehend alternative points of view.

Driver's approach includes student verbalizations. In general, however, Indian students probably are not very talkative. Rozier (1971, p. 291) noted that characteristically, "they convey their ideas and feelings largely through behaviors rather than through speech." In addition, Indian students may not attempt a task until they feel competent to perform it without clumsiness or ineptitude. Thus, they may prefer to watch a model until they have gained confidence in their ability (Burger 1968).

Havighurst (1957) asserted that Indian students are apt to show a preference for group achievement and cooperation. Therefore, competition may not be a motivator:

> Consequently, if a teacher in a government school, who has been accustomed to assume that children are competitive, tries to appeal to this kind of motivation by using spelling contests or by encouraging children to call attention to the mistakes of other children, the teacher may be perplexed to find that such teaching methods do not work very well. The Indian children may not parade their knowledge before others nor try to appear better than their peers. (Havighurst 1957, p. 109)

Other forms of motivation, such as group work and panels emphasizing cooperation, might be more successful (Bass 1971; Havighurst 1957). In addition, group reinforcement techniques could be utilized. In this method, positive behavioral goals would be set for an entire class. The class as a whole would be rewarded when the goals had been met (Bass 1971).

Hynd and Garcia (1979) used the term "passive dominance" to describe how Indian students who perform well will help others. They stated that this may be more rewarding for the students than their own individual achievement. However, they noted that teachers may see this behavior as "cheating" or "doing someone else's work." Wax, Wax and Dumont (1964, p. 82) made a similar point:

> Outside of school, if a young kinsman should get into trouble with "strangers" the child knows he is supposed to stand by him. But within the school, if he does not know an answer, the teacher says he is not to help him.

Instead of punishing Indian students for these behaviors, teachers might encourage the students to help and teach each other (Crawford, Peterson & Wurr 1967). Using Indian students to teach Indian students has two major benefits: the students may know best how to teach one another, and they will learn as they are teaching (Bass 1971).

Witt (1980) stated that Indian students generally do not engage in the same level of eye contact as non-Indians. She felt that teachers are apt to think this behavior is disrespectful, because that interpretation might apply to the behavior if it were manifested by a majority culture student. Actually, for Indian students, avoiding eye contact may be a sign of their respect for elders.

The traditional Indian respect for elders may also be seen in the Indian student's seeming passivity in the classroom. Pepper (1976, p. 140) stated that "Indian children

are taught to listen and to wait until their years of experience have prepared them to learn enough and to be influential enough to attract listeners." But not all Indian high school students respect their teachers, even though the teachers are older. Instead, Indian students may see the teachers and the school system as common enemies, and are apt to be suspicious and distrustful. They may be uncooperative in the classroom, and they may receive more satisfaction through frustrating teachers than through obeying them (Burger 1968).

Schierbeck (1971, p. 4) adequately summarized the foregoing issues of this section:

> The three basic foundations of values for any group of people are their tradition, their environment, and new ideas and ways of doing things brought from the outside, but the Indian experience has taught him to resent and even to despise the latter two of these modes of value orientation. New ideas from the outside become white ideas devised for the sake of the white man's political and economic advantage, or simply for the sake of establishing the supremacy of the white way. Schools for Indian children have always held classes on rigid schedules; students are encouraged to compete with their peers as the prime form of motivation; native languages are suppressed and English is the language for teacher and student in all subjects; behavior is controlled through harsh discipline. All of this is foreign to the Indian value system, but it is probably the key to transforming the Indian school into a center for Indian teaching. For tradition, the third foundation of values, has remained strong.

Value differences have affected the formal education of Indian students throughout the four hundred years of white-Indian contact. In fact, as Berry (1969, p. 6) stated,

> all the problems which confound us today have appeared again and again, and most of the panacea have been applied. The earliest missionary teachers were confronted with the problems of adapting their systems to new circumstances, of trying to understand the psychology of the Indian, of choosing proper goals, of determining curriculums, of surmounting the language barrier, and of overcoming parental apathy and hostility. No doubt their experiences, if we examined them, would furnish us with valuable clues.

In an attempt to find such clues and to place the present educational pattern into a broader historical framework, the next section will present a brief history of formal education of Indian students.

Formal Indian Education: A Brief Review

Berry (1969) provided an excellent review of the literature on Indian formal education. He called the 400-year history "a record of disappointment and frustration" (Berry 1969, p. 1).

Jeanotte (1981), who provided a more recent review, pointed out that education occurred long before the Indians' contact with Europeans. As in all cultural systems, the goal of teaching youngsters to pursue the tasks of adults was of primary importance in Indian societies. However, education was informal: there were no designated teachers, no classrooms. More than 500 tribes each sought to teach its children "through parents, other relatives, the old people of the tribe, religious societies, hunting and war, and work parties" (Havighurst 1957, p. 105). Indian children were

taught those things which were necessary for their survival and well-being, and which would promote the continued existence of their culture. This method was effective as long as the individual cultures remained intact.

Until recent years, the dominant culture has been almost completely in control of the Indian student's formal education. Notable exceptions, such as the Cherokee schools in the days of early European settlement, were not able to survive over an extended period of time (Wax 1963). Therefore, the formal education of American Indians can be adequately understood only if the political, economic and social ramifications of the dominant culture are taken into account. These ramifications have always structured the type of education which the Indian student has received, the goals of that education, and to some extent, its assessment.

Educational research is also structured by the prevailing value systems:

> Changing perspectives are, of course, the stuff of science and implicit values are always operating in social sciences (and probably in physical science as well). Indeed, the role of values is particularly obvious and critical in the selection of the theoretical perspective in which controversial social issues are cast. (Pettigrew 1978, pp. 58-59)

Thus, it should be recognized that what has been selected reflects a point of view about American Indian education. As McNickle (1975, p. 53) so aptly stated, "Our insight is usually that of the time in which we live."

The European's first attempts at formal education were largely due to the efforts of the missionaries. Their major goal tended to be that of assimilation: to convert the Indian student to European religious philosophies, and to the European cultural system as a whole (Berg 1982; Berry 1969; McDonald 1932; Robbins 1974; Stipe 1968; Thompson 1957). By 1850, the Missouri Synod Lutheran mission and the Catholic mission were both established in the Northwest (Seliskar 1911; Selke 1930).

Representative of these efforts was the work of Father Pirec, a Jesuit missionary who worked with Indians in Michigan and Minnesota. Seliskar (1911) eulogized Father Pirec's achievements over the 37 years of his mission, which took place during the first half of the 19th Century. The attitude towards the Indians tended to be somewhat condescending, as reflected in the following selection:

> Father Pirec had a high appreciation of the Red man's mental abilities; his experience of many years with these children of nature showed him that, if given proper opportunities, the Indians would rapidly advance in culture and civilization. (Seliskar 1911, p. 75)

It is evident that the Indians' culture was viewed as inferior to that of the whites. Indians were "children" who had to be taught a better way of living.

In reviewing the efforts of the early missionaries, Berry (1969) remarked that their attempts to assimilate the Indians were largely unsuccessful. Although some Indians converted to a Christian religion, their basic system of values

did not substantially change. Moreover, educational efforts produced dismal results. Many missionaries were forced to abandon their efforts after a brief period of time (Johnson 1935).

Stipe (1968), in an excellent review of the literature from 1800-1862 regarding Dakota acculturation, presented some explanations for the missionaries' failure. He noted that, with few exceptions, the missionaries were unsolicited and uninvited by the Indian people. He stated that most missionaries were unwilling to recognize or participate in the Indian's culture. Missionaries frequently knew little or nothing about Indians, and made few attempts to learn. Stipe contrasted the missionaries' approach with that of the fur traders, who were generally more willing to adopt Indian customs and values. He claimed that this differential approach led to greater acculturation outcomes for traders than for missionaries.

The fur traders, however, were not involved with formal Indian education. The problems which the missionaries faced in their attempts to provide such education included drop-outs and absenteeism. This was partially related to the Indian's semi-nomadic existence, and it was partially related to the seeming irrelevance of educational tasks (Stipe 1968). As Stipe (1968, p. 94) stated, "those who had been taught to read did not consider it a value, since it was of no use except in contact with the missionaries."

In the mid-19th Century, more systematic attempts to educate Indians were put into effect by the federal government (Berry 1969). During this time, more whites came into contact with Indians, due to westward expansion. The policy of total assimilation continued:

> Congress and the Indian Bureau adopted a plan to remold the Indian conception of life, or what came to be known as his "system of values." If this could be changed, assimilationists reasoned, the Indian then would become like the white man. The Indian's system of values was expressed in the education of his children and in his attitude toward the land. Consequently, the assimilationists chose to attack these two concepts as the major target of their campaign. (Szasz 1974, p. 8)

There were two major approaches to assimilation: coercion and persuasion (Berry 1969). Those who favored a more coercive approach also tended to favor military methods of control over the Indian people. Persuasive eforts were more closely aligned with proponents of the humanistic movement.

Legislation passed by Congress during this time reflected the national interest in the Indian's education and in his land. In 1869, the Board of Indian Commissioners was established, and financial support was given for industrial and other state schools in 1882 (Kickingbird & Kickingbird 1979). By 1871, almost all tribes were established on reservations (Dorris 1981).

Federal interest resulted in increased school enrollments and attendance. It should be noted that "until after the Civil War only a relatively few Indian children were ever in school" (Bass 1971, p. 22). In order to handle the increasing number of children, more Indian schools were created.

The birth of the boarding school appeared during this period, with the establishment of Carlisle Indian School in 1878 (Birchard 1970). Boarding schools grew in numbers. The fact that Indian children were widely scattered, and available transportation was minimal, served to justify the establishment of these schools (Hoffman 1969). In addition, there was a widespread belief that separating Indian children from their families and communities would more readily lead to assimilation ("Indian Education" 1940; Thompson 1957). As a result of this belief, educated Indians "became the first victims of the 'either/or' policy of assimilation. Their education forced them to choose either the culture of the white man or the culture of the Indian; there was no compromise" (Szasz 1974, p. 10).

By the turn of the century, there were four types of schools for Indian students: off-reservation industrial and military boarding schools, mission schools, public schools, and reservation schools. Of these different systems of education, perhaps the most effective were the military schools (Kickingbird & Kickingbird 1979). These schools did not represent a radical break from Indian mores. The fact that warriors were valued in many Indian societies made training as military leaders desirable for many Indian students. In addition, the climate of most of these schools fit in with Indian values: there was an emphasis on individual responsibility, in which each student was given a rank and the au-

thoritarian and authoritative figure of the teacher was minimized.

With Roosevelt's New Deal, increased interest in social welfare emerged. This interest impacted on Indian education (Jeanotte 1981). Beginning in the 1920's, a radical shift in policy towards Indian education occurred. This shift was spearheaded by the Meriam Report (1928), and by the efforts of John Collier, who served as Indian Affairs Commissioner from 1933-1945.

The Meriam Report (1928) helped to temper the policy of total assimilation. This report attacked the prevailing Bureau of Indian Affairs (BIA) educational system. The report was especially negative towards boarding schools, charging them with overcrowding, improper nutrition, child labor, harsh discipline, minimal medical care, and inadequate staffing. The curriculum was deemed too uniform, and it was noted that only white values were stressed. Among the Meriam Report's recommendations was the recognition of cultural differences.

John Collier attempted to carry out many of the recommendations of the Meriam Report. He emphasized the importance of cross-cultural education, "in which the Indian child would learn through the medium of his own cultural values while also becoming aware of the values of white civilization" (Szasz 1974, p. 50). In general, Collier's policies reflected the prevailing attitude of the times, an attitude which was

> opposed to the deliberate destruction of Indian culture, less committed to the complete assimilation of the Indian, and more sympathetic to the Indian's retention of his identity and such portions of his tradition as he chose to perpetuate. (Berry 1969, pp. 17-18)

Under Collier, educational programs were liberalized. Higher education was emphasized, and student loans became available. In-service teacher training was also supported (Kickingbird & Kickingbird 1979).

Collier also started the community day school movement. The emergence of the community day school may be seen as a direct result of the boarding school criticisms initiated by the Meriam Report. The media had quickly reiterated these criticisms. For example, an editorial entitled "Civilising the Indian" (1934, p. 33) charged the federal government with having supported

> a system of education for Indian children which took them from their parents at the age of seven, kept them in a boarding-school until they were eighteen, underfed and underclothed them, exposed them to the worst features of the routine of white public schools, and spared no pains, at any point, to stamp out their Indian culture and heritage.

In 1934, 75% of Indians attending school were in boarding schools; by 1944, 67% of all enrolled Indians were in reservation day schools. Eighty-four new day schools had been created (Brightman 1971). The day schools found public support by decreasing per capita student costs. "Civilising the Indian" (1934) reported an average per capita expenditure of $400 per day for boarding school students, and claimed that community day schools were able to cut that figure in half.

The community day schools were largely controlled by local governments, with the result that the BIA lost its direct control over Indian education. Indian enrollment figures published in 1940 showed 52% attending public schools, 37% attending government (BIA) schools, and 11% attending private, mission, or other non-federally-funded schools ("Indian Education" 1940).

As previously stated, teacher training was a major emphasis of Collier's program. In trying to teach educators to be sensitive to the characteristics and needs of Indian children, Collier enlisted the aid of anthropologists. Szasz (1974) reported one negative outcome of this experience: an attitude of distrust and suspicion emerged between teachers and anthropologists. She indicated that remnants of this attitude may be seen in the educational system today.

In general, the attempt to provide cross-cultural education during the Collier years was not entirely successful. This was partially due to the fact that many aspects of Indian life were ignored:

> Bureau educators of the 1930's . . . approached Indian culture by breaking it into components: history, customs and tradition, religion, art, language, philosophy, societal structure and regulations, and a system of values. Only three of these areas were introduced into the curriculum of Bureau schools - history, art and language. (Szasz 1974, p 77)

After World War II, enrollment figures again increased. This was allegedly due to a new appreciation of education

among Indian parents (Bass 1971). A new piece of legislation, Impact Aid, was passed in 1950, providing a large source of money for Indian children (Yudorf 1971).

During this time, the theory of cross-cultural education survived. However, the emphasis in the schools tended to shift from Indian culture to the material culture of the dominant society (Szasz 1974). Representative of this emphasis are the experiences of 23 Navajo women, as reported by Metcalf (1976). These women, who had all attended reservation boarding schools in the 1950's, were interviewed in private sessions. Summarizing the major themes of the interviews, Metcalf stated:

> First, there was the removal from home and the prospect of not seeing one's parents again for several months. Then followed an inability to communicate with the persons who were to become the most significant and powerful figures in one's daily life. Outward manifestations of one's identity were altered, such as hair style, clothing, and even personal name. The Navajo cultural value attached to personal modesty was violated by enforced communal showers, delousing, and crowded living conditions. The sense of security and trust in one's family was replaced by confusion and fear. (Metcalf 1976, p. 538)

As the 1950's progressed, Congressional attitudes changed once more, and an official policy of termination commenced (Jeanotte 1981). This policy was heralded by the passing of House Concurrent Resolution 108 in 1953. By this act, Indians lost the right of self-government and federal protection of their lands, and became subject to state taxes and hunting and fishing laws (Dorris 1981). The act, purportedly

designed to make Indians first-class citizens, resulted in the elimination "of services provided for in treaty agreements by the Federal Government, including health and educational services" (Kickingbird & Kickingbird 1979, p. 21). Because of the curtailment of BIA support, this decade was termed "devastory" by one Indian scholar (Jeanotte 1981).

However, in the 1960's, a renewed interest in Indian education and culture emerged. Kennedy's New Frontier actively promoted ideas and policies favoring social welfare programs. Once again, a report spearheaded the movement towards improvement in Indian education. The Senate Subcommittee on Indian Education, under the direction of Robert F. Kennedy, produced the report in 1969. This report reiterated many of the conclusions of the Meriam Report (Szasz 1974). However, boarding schools were not the primary educational facilities under attack. All schools providing education for Indian students came under heavy criticism, particularly for their failure to understand cultural differences. It was concluded that the effect of this failure was

> a dismal record of absenteeism, dropouts, negative self-image, low achievement, and ultimately, academic failure for many Indian children. (Senate Subcommittee on Indian Education 1969, p. 150)

As a result of this study, the Indian Education Act was made into law on June 23, 1972. This law "provides financial assistance to local education agencies (LEA's), Indian-controlled schools, Indian tribes, Indian organizations, in-

stitutes of higher education, federally supported schools for Indian children, and State education agencies to meet the special educational needs of Indian children and adults" (U.S. Department of Education 1980, p. 1). Among the provisions are financial support for the development of curriculums dealing with Indian history, culture, and heritage. In addition, the act is "the first major education act which focuses on local control of program monies and operation within public school districts, where most Indian school children are in attendance" (Sahmaunt 1973, p. 9).

Another important piece of legislation for Indian education was passed earlier in the decade. The Elementary and Secondary Education Act of 1965 provides financial aid for schools with high concentrations of low-income students who are achieving below grade level (Yudorf 1971). Among the provisions of the act are compensatory education and library resources (Gipp 1979).

Ideas and attitudes do not change as a result of legislation. Old beliefs take a long time to change, for the majority culture member as well as for the Indian. The mentality of many members of the majority culture during the 1960's was summarized as follows:

> The path to educational parity was interpreted as conformity to majority values, which were presumed to be the universal norm. Statistical data assumed Western civilization as the cultural context, and minorities became subgroups which lacked critical attributes. (Deloria 1981, p. 20)

Deloria (1981) remarked that this attitude is still prevalent in our society today.

A movement towards Indian self-determination, commencing in the 1960's, has been largely supported by the federal government. This movement has not diminished, but has grown in subsequent years (Jeanotte 1981). Proponents of Indian self-determination demand recognition of their Indian identity. They do not ask to be treated as United States citizens, but as United States Indian citizens:

> The insistence on the right to special status distinguishes Indian "activists" from those of virtually every other minority group, and is often a bone of contention between Native Americans and their potential supporters . . . From the Indian (and legal) point of view . . . Indian tribes granted rights to the United States, and thereby to a degree remain in control of everything not expressly granted, whereas all other groups seek rights from the various branches of the American government. Moreover, Indians do not want blanket "equality": they feel they have paid well - and in advance - for the few special rights and privileges accorded them, and are reluctant to join a common pool of "citizens." The right to self-determination on the part of an Indian tribe is virtually the opposite of equal access. (Dorris 1981, pp. 61-62)

In Indian education, the movement for self-determination has given rise to Indian-controlled schools. In 1976, there were 36 such schools, and 20 other schools which were moving in that direction:

> The Indian controlled schools include those contracted to tribes from the Bureau and funded by the Bureau; private schools funded primarily by foundations and Title IV of the Indian Education Act; and public schools with majority Indian school boards (Bank Street College of Education 1976, p. 186).

However, the majority of Indian students attend public schools which are not Indian controlled. In 1971, more than two-thirds of all Indian students, or approximately 180,000, were attending public schools (Yudorf 1971). About six percent attended mission and private schools, a figure which has remained relatively stable for a number of years (Bank Street College of Education 1976). The rest of the students were enrolled in BIA schools.

According to Brightman (1971), one-third of all Indians have attended boarding schools at some time in their lives. At first glance, this figure may appear to be somewhat surprising, in light of the criticisms against boarding schools which were initiated during the Collier years. Brightman (1971) visited three boarding schools, which were located in Nevada, California, and Arizona. He noted deficiencies in these schools, which he claimed were typical of all boarding schools. These deficiencies included few Indian teachers, little or no medical staff, inadequate recreational facilities, little time for meals, and enforced church attendance. Brightman stated:

> Each boarding school imposes its own rules, regulations, and disciplinary measures. These vary according to the superintendent in charge, but ordinarily each hour of each child's life is controlled by the clock. Schedules are posted everywhere. (Brightman 1971, p. 18)

He concluded that boarding schools are "pathetic examples of what education should not be. It is difficult for outsiders

to conceive of just how medieval these schools are" (Brightman 1971, p. 19).

Klinekole (1979) added to the criticisms against boarding schools. She believed that attending a boarding school involves a radical cultural break for Indian students. Because they are far from home, the students are deprived of parental guidance, family support, and cultural reinforcement. Rules and regulations are often confining, and there may be little or no counseling. Klinekole complained that students in this setting may exhibit depression, anxiety, and poor self-concept. They are also likely to engage in alcohol abuse.

The attendance in BIA off-reservation boarding schools has dropped in recent years, from 5,822 in 1972 to 4,631 in 1980. There are currently twelve of these schools, which "serve primarily as alternatives to either home, local, public schools, or BIA schools, for students with social adjustment problems" (Select Committee on Indian Affairs 1980, p. 226). Pupil turnover rates are high, averaging between thirty to fifty percent in a given year. High school achievement levels are generally three to five grade levels below the national average. As has been stated, "the boarding school is a way of providing substitute care for children whose families are disrupted or are considered incapable of handling or caring for them, or who have additional problems" (Bank Street College of Education 1976, p. 176).

Thus, the fact that boarding schools have survived is due to their provision of education for students with special problems, for whom no better options are available. However, as the Bank Street College of Education report (1976, pp. 182-183) stated:

> That boarding schools are a mixed blessing is clear. They have been and continue to be institutions which symbolize the isolation and social disruption of many Native Americans. They cannot simply be abolished without the creation of other arrangements for the children they serve. Furthermore, there are Native American leaders who feel that the boarding schools play an important role and who do not want to see them disappear. There is no doubt whatever that the boarding schools require radical improvement, both in their educational programs and in the quality of life they offer the students. They must have the resources to respond more effectively to the human needs which are their special responsibility, and which cannot be divorced from programs in classrooms. All schools have responsibilities to individual students that go beyond the specific curricula they offer. Boarding schools have a greater responsibility, for they offer substitutes for family life. As an Indian Mental Health worker in one of the Pueblos said, "When children go to boarding school at a young age, they do not learn how families work."

According to Noe Medina, a staff member to Senator Edward Kennedy, the current federal funding policies relating to American Indian education do not foster optimism for the future (Medina 1981). Projected budgetary cuts may involve intentional curtailment of existing programs. In addition, unintentional cuts may occur due to the fact that minor programs affecting Indian education may be located within larger structures. Medina asserted that the States will need to provide more financial assistance in future years, but he

noted that the States often have an antagonistic relationship with Indian educational programs. He believed that, due to projected problems with funding, more demands will be placed on individual teachers and on school systems to secure necessary teacher training and to implement educational innovations.

This section has briefly reviewed the history of American Indian formal education, from the days of the missionaries through the present movement towards Indian self-determination. It has been noted that, throughout much of the history, the majority culture has stressed assimilation in the educational process. At the present time, many educators are looking towards acculturation as a viable alternative to working with Indian students. Crawford, Peterson and Wurr (1967, p. 49) defined the goal of acculturation:

> the goal here is to familiarize the Indian pupil with major aspects of the majority culture and to equip him with the skills needed to function there when he wishes to do so. We want to help him become multi-faceted, not narrower; to add to his repetoire of responses and improve his perception of appropriate settings for different kinds of behavior. This does not require his committment to a single way of life as the only "right" way for him.

In order to provide a more thorough understanding of acculturation, the next section will address this issue.

Assimilation vs. Acculturation

In this section, the concepts of assimilation and acculturation will be differentiated. A historical approach will be used initially to elucidate the two concepts, as they operated for both Indians and Europeans in early contacts. The process of acculturation will then be described, and possible negative outcomes during the process will be delineated.

It has been stated that early European contacts with American Indians stressed assimilation, i.e. absorption into the European culture. Dorris (1981) suggested that this goal resulted from the European's lack of experience with different cultural groups, prior to colonization in North America. He stated that, in spite of interethnic strife and turmoil, the European culture was fairly homogenous. With only a few exceptions there was one language base, which was defined as Indo-European. And the religious tradition was largely Judao-Christian. The European culture, as a whole, was a patrilineal society. "Notions such as cultural relativity seem to have been almost totally absent, and it was at first expected and eventually mandated that all Native peoples would unremittingly and unhesitatingly forsake their own languages, mores, and beliefs, and embrace European substitutes" (Dorris 1981, p. 45).

In contrast, at least 400 different Indian cultures existed in North America in the 15th Century. These cultures

showed far greater variability than did the cultures of Europe. For intance, the number of separate languages spoken in North America was greater than in all of the rest of the world combined (McNickle 1975). As Dorris (1981, p. 45) stated,

> Indian tribes had long existed in a plural world where foreign cultures differed substantively from one's own. Other groups looked, spoke, dressed, believed, and prayed in ways singularly appropriate to themselves. This is not to imply that all cultures were regarded as equally good or worthwhile; like people the world over, each Native American probably felt confident that his or her people were the raison d'etre of creation and the most enlightened, interesting, tasteful, and "humane" society imaginable. But no sense of superiority, however severe, could contradict the inescapable observation that other groups whose ways and beliefs seemed bizarre and inexplicable similarly felt themselves to be the center of the universe.
>
> Thus it would appear that initial contact with Europeans would be rather unspectacular for members of a Native American society. In many respects historical record indicates that Europeans were treated as neither more nor less exotic than would be members of another Indian group. Native people seem not to have been especially intimidated by, or impressed with, most of the novelties brought as trade goods, and often appear to have regarded the newcomers with a mixture of curiosity and concern: though Europeans looked like adults, they frequently seemed unable to feed themselves and to be perpetually on the brink of starving to death.

Wax (1971, pp. 9-10) illustrated how Indian people had been long familiar with the process of change, and even of acculturation, i.e., cultural borrowing or adaptation:

> One myth that has long disturbed the perception of Indian affairs, and has been pervasive even among anthropologists, has it that the Indian societies were static until the coming of the Whites, whereupon they deteriorated under the pressures of con-

> quest and contact. Scholars have been oriented toward seeking out the aboriginal Indian, the culture "before the coming of the Whites." Strictly followed, such a condition would have excluded the most significant and exciting chapters of Apache and Comanche history, as well as that of other peoples, such as the Iroquois and the Sioux. (It would also have excluded such ecological adaptations as the spread of maize civilization throughout the northern hemisphere and such political developments as the Aztec Conquest of Middle America.)

Indian people from different cultural groups had exchanged goods and ideas throughout their history. Perhaps this is one reason why many of them were so easily able to incorporate European innovations. Those which could be readily adapted into their life styles and underlying value systems were quickly acquired.

It should be emphasized, however, that this process was radically different from assimilation. Blessing (1956) presented an interesting example of this difference. He noted that Indian costumes changed as a result of white contacts. The whites brought glass, beads, cloth, and other materials, which had been foreign to Indian cultures. However, the resultant designs and innovations were Indian in origin. "Through acculturation there developed a blend of the old and the new in both materials and methods" (Blessing 1956, p. 1).

In many instances, Indian people chose to acculturate. However, as was previously noted, the goals of many Europeans were directed towards Indian assimilation. The Europeans, with their advanced military technology and greater

numbers, were soon established as the dominant culture. As such, they effected many changes in Indian life styles which were incongruous with Indian values (Josephy 1969).

For example, in Minnesota, an attempt was made to transform certain Indian nomadic societies into agrarian societies (McDonald 1932). Since agrarian values did not correspond with those of a nomadic society, the assimilationists did not successfully realize their goal. However, they succeeded in destroying the nomadic structure, so that the Indians were no longer able to pursue their traditional life styles.

Most authors focus on how the Indian changed as a result of white contact. An article by Hallowell (1957) examined white acculturation due to Indian contact. He stated that the Indians introduced "new food plants, new dyes, tobacco, unheard-of languages, novel modes of life that provoked moral and political disruption and challenged the authority of old traditions, (and) fresh subject matter for original themes in literature" to the white man (Hallowell 1957, p. 201). The white man's acculturation seems to have run deeper than just the exchange of material goods. Hallowell pointed to the fictional depiction of James Fenimore Cooper's Natty Bumpo:

> Cooper simply takes it for granted that there were psychological consequences which affected the backwoodsman as a result of his contacts with the Indian. Natty Bumpo personifies these. In a semi-Indianized white man, who has managed to acquire the best "gifts" of each side, Cooper projected a literary image acceptable to Americans themselves. (Hallowell 1957, p. 211)

Gilman (1982) raised another interesting point regarding white acculturation due to Indian contact. Because of Indian demands for certain trade goods, white traders "found themselves stocking goods that had no parallel in European culture" (Gilman 1982, p. 99). For example, European technology developed a new gun for Indian needs:

> Indian hunting methods required lightweight, dependable guns that would stand up to extreme cold. They had to be simple to load and inexpensive. After a century of improvement, British manufacturers arrived at the perfect combination of factors. They called it the Northwest gun. (Gilman 1982, p. 103)

Thus acculturation often operates as a mutual exchange of cultural goods and ideas, which may lead to new developments within each culture. Assimilation, on the other hand, involves the complete annihilation of one culture, and its replacement by another.

Acculturation may be synonymous with accomodation. And as Warren (1957, p. 56) stated, Indians have been accomodating to whites since the first contacts:

> Measured by externals, by clothes and housing, by use of non-Indian technology and gadgets, or by ways in which many now make a living, it may appear that the people . . . have on the whole adopted our ways . . . The Indians have been making accomodations and adjustments to our society and economy from early times, and they continue to do so . . . But adoption of the externals of American life is not neatly correlated with accompanying changes in basic Indian attitudes, mind, and personality. Feelings and attitudes, the life of the inner man, change more slowly than utilitarian features of comfort and convenience.

In other words, through acculturation, individuals may add to their repetoire of beliefs, ways of behaving, and material possessions. However, they do not necessarily erase or distort their prior life-styles.

As has been previously stated, Indian children's values are well-defined by the time they enter elementary school. Indian children, like children of all societies, learn their values through the process of identification with their parents and other significant persons. Identification is the human ability to introject experiences with others, which

> not only defines each of us as individuals, it places us within the stream of culture and provides the vehicle for its transmission. We carry the past within us, in the traditions, attitudes, values, and behavioral templates that we have absorbed from our parents and significant others. Through our capacity for identification we become the carriers of culture, bound to transmit the past into the social present and future. Thus identification might be described as a psychological genetic code, for while we do not transmit ideas, concepts, attitudes, or emotions through any biological process, we possess certain inherent psychological capacities that make social transmission possible from one generation to another. Genetic transmission ensures the stability of species; psychological transmission ensures the cohesion of society. (Menaker 1978, p. 383)

To the extent that Indian children's parents have assimilated or acculturated, the values which they bring to the classroom will be different from traditional values. Theoretically, these students would have less difficulty in the educational system, since their values would be more closely aligned with those of their teachers. In contrast, those students whose parents are more traditional may have greater

problems in school. From their field observations in one Chippewa community over three summers, Miller and Caulkins (1964) concluded that the more traditional Indian adolescents were more apt to drop out of school.

Parker (1964) postulated two modal points in acculturation. The first modal point was defined as the imitative stage, in which the basic self-identity of individuals is not affected. During this stage, aspects of material culture and attitudes of white society are imitated. For example, Indians in the imitative stage may wear watches and consult them frequently. However, time remains unimportant. They may not realize that time has a different meaning for others, or they may not choose to value time as others do. The imitative stage does not involve the introjection of values.

Pierce, Clark and Kaufman (1978-1979) termed this stage "Anglo Face". By this, they meant that acculturation is "skin deep." Underlying identity and values are traditional, even though language and standards of behavior may be Anglo-American.

Parker (1964) named the second modal point of acculturation the internalization stage. During this stage, new values become part of the motivational system and self-identity of the individual. And at this stage, ethnic identity problems are often seen.

These identity problems result from the counteridentifications which the individual has made (Menaker 1978). The individual may feel guilty at the apparent rejection of his or her parents and their values. Concurrently, he or she may hate some of the old identifications.

No one who has written about the future of Indians in America has denied that change is inevitable. And practically all authors have recognized that change is almost always difficult and traumatic. Many authors have stressed the need to discover ways in which change can be healthily encompassed by Indians. Otherwise, the Indian student who cannot successfully acculturate

> may consciously or subconsciously reject himself and engage in acts of self-denigration, such as drinking to excess, flaunting the law, fighting publicly, and other antisocial behavior; or he may go to the other extreme and take refuge in "Indianness," seeking to live in an atmosphere of complete chauvinism and false pride, in which case he may withdraw in a state of indifference and lethargy; or he may be astride a fence, torn in both directions, in a state of complete frustration. (New 1970, p. 20)

Voget (1956) believed that forced cultural change leads to a pervasive anxiety. May and Dizmang (1974) theorized that cultural conflict and rapid change produces low self-esteem.

Individuals who successfully acculturate accomplish this objective through a process of reintegration and reconciliation following exposure to new ways. Reintegration involves the restructuring of prior life styles within the personality, so that these life styles are not deprecated or rejected

(Meyer 1974). Following reintegration, reconciliation between the old ways and the new ways is possible.

In acculturation, the old ways are not rejected out of hand: to reject the old ways would be to assimilate. Nor are the new ways rebelled against in self-destructive fashion. Rather, the individual creates a unique life style, in which the old ways and the new ways are amalgamated into a cohesive whole. The individual borrows what will fit in easily with the old ways, and makes adaptations in some of the new ways (Hallowell 1957).

From this vantage point, criticisms against Indian educational methods may be better understood. It has been a longstanding complaint that existing educational methods do not easily permit acculturation:

> The school, representing the mainstream values, seeks to assimilate the Indian pupil rather than respect his identity, and accomodate him in the curriculum. It rhetorically expounds the vaunted pluralism of America, but refuses to practice it in the classroom. (Heath 1971, p. 26)

Because the schools have only been directed towards assimilation, there is little opportunity for Indian students to acculturate. If they choose not to assimilate, they rebel: they drop out, skip school, become apathetic. Overall, they fail to achieve academically.

This section has focused on the process of acculturation. It has been maintained that one factor in Indian underachievement is that the schools are not geared towards acculturation. Thus, value differences may impair the educational process.

One way to discover solutions for Indian education is through systematic investigations. Using cross-cultural research techniques, the values of Indian students can be assessed. The next section will explore this issue.

Cross-Cultural Research in Indian Education

Research designed to explore the Indian value system, the Indian culture and aspects of Indian education has been viewed as a means to discover alternative plans, systems, and processes for education (Berry 1969; Brophy & Aberle 1966; Corbett 1970; Robbins 1974; Sawyer 1976).

Methodological problems abound in cross-cultural research. As the Laboratory of Comparative Human Cognition (1979) stated, chosen stimuli may be meaningless to members of another culture, instructions may be poorly understood, and the subjects may be bored or frightened. It is important to enlist subject cooperation, and to insure privacy. It is also important to present task directions in such a way that they will be easily understood.

Perhaps the overriding difficulty is that of constructing tests which have some degree of validity for use with subjects from another culture. This appears to be a particular problem in the area of values. It seems likely that culture would influence ratings of such variables as the self, the ideal self, and self-esteem, since they are deeply interwoven with life styles and value systems. Cress and O'Donnell

(1975), in their study of 104 Oglala Sioux high school students at Pine Ridge, South Dakota, felt that the existing self-esteem inventories were invalid for use with Indian groups, since the values of these groups had not been taken into consideration in the construction of norms. Perhaps more important, however, is that the test items themselves often do not take cultural values into account.

To illustrate the ways in which cultural values can affect test validity, a study by Oanh and Michael (1977) may be cited. Using the Piers-Harris Children's Self-Concept Scale with fourth and sixth grade children from six ethnic groups, they discovered differences in self-concept ratings which seemed to vary as a function of culturally prescribed values. For instance, a significant difference was found by comparing mean scores of 18 black and 24 Vietnamese children on a scale of the Piers-Harris designed to measure physical appearance and attributes. Oanh and Michael (1977, p. 1013) explained the significant difference by stating:

> That Negro pupils scored highest among all ethnic groups on such a measure of physical appearance appears to reflect their general interest in, and admiration for, physical strength and endurance. That Vietnamese pupils in the sample scored lowest on physical appearance may be interpreted as a reflection of a general attitude of reservation and modesty characteristic of Oriental culture.

The inadequacies of existing tests has led some researchers towards a search for culture-free measuring instruments. But in the final analysis, all tests are culture laden. As Goodenough and Harris (1950, p. 399) stated,

> the search for a culture-free test, whether of intelligence, artistic ability, personal-social characteristics, or any other measurable trait is illusory . . . the naive assumption that the mere freedom from verbal requirements renders a test equally suitable for all groups is no longer tenable.

Chapter III of this paper presents a further elaboration of difficulties in test construction, and explains the approach used for the development and selection of test instruments for the present study.

In conducting cross-cultural research, the goal of generating solutions should be emphasized. Deloria (1969) complained that too often, research undertaken in Indian communities is irrelevant and does not produce practical, concrete solutions for Indian people. As he stated, "compilation of useless knowlege 'for knowledge's sake' should be utterly rejected by the Indian people. We should not be objects of observation for those who do nothing to help us" (Deloria 1969, p. 98).

On a more humorous note, Deloria poked fun at anthropologists who regularly visit Indian communities. He particularly condemned their research efforts:

> The anthro is usually devoted to PURE RESEARCH. Pure research is a body of knowledge absolutely devoid of useful application and incapable of meaningful digestion. Pure research is an abstraction of scholarly suspicions concerning some obscure theory originally expounded in pre-Revolutionary days and systematically checked each summer since then. A 1969 thesis restating a proposition of 1773 complete with footnotes to all material published between 1773 and 1969 is pure research.

> There are, however, anthropologists who are not as clever at collecting footnotes. They depend upon their field observations and write long adventurous narratives in which their personal observations are used to verify their suspicions. Their reports, books, and articles are called APPLIED RESEARCH. The difference, then, between Pure and Applied research is primarily one of footnotes. Pure has many footnotes. Applied has few footnotes. Relevancy to subject matter is not discussed in polite company. (Deloria 1969, pp. 85-86)

Deloria may overstate his case. However, some of his points appear to be well taken. Research which is not pragmatic in orientation may well have the effect of antagonizing the Indian community. Nobles (1976) made a similar point regarding the black community and its relationship with psychologists and anthropologists. He accused these scientists of "scientific colonialism": they remove data from the community for the purpose of writing articles, feel that they may access any data they desire, and in turn keep that data away from the community.

In this section, the subject of cross-cultural research was discussed as a means to discover solutions for Indian education. Methodological problems in cross-cultural research were addressed, including difficulties in test construction. It was emphasized that research should yield results with pragmatic implications. The next section will present the rationale for the present study.

An Exploration of Indian Values in Education

The present study focused on exploring the differential values of Indian high school students, as they relate to educational achievement. Values of low and high achieving Indian students were compared with each other, and with those of their teachers.

While a major interest in the study was in value differences, the study was not designed to assess differences between Indian and non-Indian students. The primary interest was in Indian student academic achievement. As such, the interface between the Indian students and their teachers was chosen as the more meaningful relationship to explore than the relationship between Indian students and non-Indian students.

In addition, many factors mitigate against making direct Indian-non-Indian student comparisons. Socioeconomic status, academic achievement, and the effects of discrimination and prejudice have been previously recognized as some of the possible potential confounding variables. It is difficult to achieve comparison groups in which one or more of these variables could not influence the outcome.

Thus, comparisons between Indian and non-Indian students were mainly confined to academic, demographic and social variables. Only one other set of explorations used non-Indian students: those dealing with the concept of self-esteem. In order to determine if self-esteem might operate

differently for Indian students than for non-Indian students, Indian and non-Indian student responses to three self-esteem measures were analyzed.

Two measures of values were utilized: a character trait preference task, and a task eliciting perceptions of the self, ideal self and others. It was expected that those Indian high school students whose reported character trait preferences and perceptions of themselves, ideal self and others were closer to those of their teachers would demonstrate greater academic proficiency. This hypothesis had not been previously tested with Indian students. However, a study by Bauer (1975) provided analogical support. Using the semantic differential technique, Bauer found that those college students whose responses related more closely to the responses of their professors attained higher college grades.

It was also expected that high achieving Indian high school students would be more likely to participate in traditional Indian activities, and would place a more positive valence on the concept THE AVERAGE INDIAN. A study by Jeanotte (1981) of Indian students who had dropped out or graduated from college attests to the positive benefits of acculturation (i.e., the reconciliation of differences) in the educational process. Jeanotte collected data on 116 students who had attended the University of North Dakota. His sample consisted of 71 dropouts and 45 graduates from four

North Dakota reservations. Among other findings, Jeanotte discovered that graduates had significantly higher high school achievement grades and ACT scores. They were also more likely to participate in traditional Indian activities. They were more culturally involved in the use of the American Indian languages, the practice of Indian religion and ways, and participation at powwows and other Indian activities. Clearly, it appears that these Indians were successful at amalgamating traditional and white values.

In the present study, subjects were asked to rate the semantic differential concepts MYSELF, THE AVERAGE INDIAN and THE AVERAGE WHITE PERSON. Self definitions were contrasted with those provided for whites and for Indians. This process yielded a measure of identification: individuals who rated themselves closer to one group than to another were seen as more closely identified with that group.

In addition, subjects were asked to provide ideal self definitions, using ratings of THE KIND OF PERSON I WOULD LIKE TO BE. As previously stated, ideal self is synonymous with an individual's value system regarding his or her ideal identity and behavior. Self-ideal discrepancy scores were obtained. These scores have often been used as a measure of self-esteem, and served as one of the three self-esteem measures in the present study.

The inclusion of self-esteem in the present study arose from the fact that self-esteem is a valuing process. As

Beane and Lipka (1980) noted, measurements which do not take an individual's values into account in measuring self-esteem will prove meaningless. They presented an example which illustrates this point: that of academic achievement. Students who perform well, according to these authors, do not necessarily regard themselves more positively. There are, in fact, three possible outcomes for high achievement. If students value academic achievement, their self-esteem will be heightened. If they do not care about academic achievement, perhaps preferring aesthetics or athletics, there will be no effect on their self-esteem. High achievement can also lead to lowered self-esteem. This is apt to occur if a culture or subculture denigrates such achievement, as is sometimes seen in delinquent populations.

Thus, personal maladjustment may be defined as the difference between self and ideal self; social maladjustment is more properly understood as the difference between self and the generalized ideal self of a particular society (Bills, Vance & McLean 1951). To the extent that lack of insight and psychological defensiveness, conscious and unconscious, does not interfere with self and ideal self formulations, these definitions appear to be valid.

It is generally believed that academic achievement is clearly related to self-concept, for both majority culture and minority culture members (Rosenberg 1965). Purkey (1970, p. 14), in an extensive review of the literature on

self-concept and academic achievement, stated that "academic success or failure appears to be as deeply rooted in concepts of the self as it is in measured mental ability, if not deeper . . . The student's attitudes limit the level of his achievement in school."

Perhaps the most frequently cited piece of research in the area of academic achievement, the Coleman report (1966), included student self-reports on school interests, designed to assess attitudinal variables toward school achievement. These reports were correlated with academic achievement. Coleman (1966, p. 320) summarized his findings by stating:

> whatever measure is chosen, the attitudinal variables have the strongest relation to achievement. It is, of course, reasonable that self-concept should be so closely related to achievement, since it represents the individual's estimate of his own ability . . . The relation of self-concept to achievement is, from one perspective, merely the accuracy of his estimate of his scholastic skills, and is probably more a consequent than a cause of scholastic achievement.

However, it is not certain whether or not academic achievement is related to self-esteem for all students. As previously stated, academic achievement will be related to self-esteem if an individual values such achievement. And although many minority group members value academic achievement, it is uncertain whether this is true for all minority group members, or for minority groups in general. Specifically, low academic achievement may not produce negative self-esteem for Indian students, if they do not value academic achievement.

Whether or not Indian students value academic achievement cannot be determined from the empirical studies which have been conducted. However, at least two studies suggest that the relationship between self-esteem and academic achievement may not necessarily be positive for all Indian students. Chadwick, Bahr and Strauss (1977) analyzed data from 147 secondary-school Indian students in Seattle, Washington. The results of Rosenberg's self-esteem scale were correlated with grade point average (GPA) for each student. Self-esteem was not significantly related to GPA for either male or female students. Cress and O'Donnell (1974) studied 104 Oglala Sioux high school students. Correlations between the Coopersmith Self-Esteem Inventory and GPA were found to be insignifica

Observational reports indicate that, for some Indian students, upholding certain cultural values may take precedence over school achievement. For instance, Harrington (1979) gave an example of a Navajo student who would rather get an average grade than appear different from his peers. Receiving a high mark produced shame and embarrassment, and was interpreted as failure. Harrington concluded:

> While the findings from psychology consistently suggest that competence on a particular task is rewarding, the anthropological literature would suggest that competence in a task valued by one's culture is more rewarding than competence in a task not valued by one's culture, and that failure at a task valued by one's culture is more costly than failure at a task not valued by one's culture. (Harrington 1979, p. 73)

Whether or not Indian students have low self-esteem has been disputed in recent years. Lowered self-esteem has often been hypothesized to result from culture clash. The most frequently cited study providing evidence for this hypothesis is Bryde's (1966) assessment of Sioux students. Bryde administered the Minnesota Multiphasic Personality Inventory to a sample of seventh, eighth and twelfth grade Indian students from the Pine Ridge Reservation in South Dakota. He used a sample of equivalent-aged non-Indians as his comparison group. The Indian students tended to evidence more anxiety, depression, and social and self-alienation than the white students. In addition, degree of Indian blood was positively related to psychological disruption.

An alternate explanation for Bryde's finding would hold that he was "imposing inappropriate mainstream cultural criteria in measuring . . . personality characteristics" (Ahler 1980, p. 248). Supporting this viewpoint are Fuchs and Havighurst (1973). These authors disputed Bryde's findings, claiming that the self-esteem of Indian students is not lower than that of other groups. They used a Semantic Differential and Self-Esteem Inventory with twelve to seventeen-year-old adolescents from both white and Indian communities, and found no significant differences between the two groups.

One reason for discrepant findings in self-esteem research among experimenters such as Bryde and Fuchs and Havighurst may be the theoretical models of the particular ex-

perimenters conducting the studies. Pettigrew (1978) noted three themes in the social science literature regarding self-esteem among subjugated minorities. He defined these themes as the coping-with-oppression thesis, the trait liability thesis, and the proud, strcng minority thesis. He stated that these themes have been upheld at various times, as a result of society's stance toward minority group members. Those who uphold the coping-with-oppression theme are apt to report negative self-esteem for minority members. Proponents of the trait liability theme are also apt to find self-esteem differences between minority and majority members, and they may use terms such as "cultural deprivation" to explain the differential performance of minority group members. Finally, researchers who favor the proud, strong minority theme may fail to find any self-esteem differences between majority and minority members, blaming methodological difficulties in self-esteem measurement for discrepant findings.

Even among researchers operating under different theoretical models, the inadequacy of existing methods of self-esteem measurement is widely recognized. Wylie (1961, 1974) provided an excellent review of research literature pertaining to the self-concept and self-esteem. She noted the widely discrepant definitions of self-concept and self-esteem, and the variety of instruments which have been used in assessment. These factors have led to studies which are difficult to compare. As Dreyer (1970, p. 2) noted,

> Attempts to define operationally or measure the "phemomenal self" have produced a wide variety of tests and instruments. . . operational definitions of the self-concept have seldom used common instruments whose reliability and validity have been adequately demonstrated. As a result, self-concept studies have tended to produce a confusion of measuring instruments, most of which lack precision and validity, so that any confidence which might be placed in the inferences so often drawn from their results is severely undermined.

In addition, the measurement of self-esteem is difficult, due to defensiveness and the need for social approval:

> The construct of self-esteem represents an internal state, accesible to the observer only from the vantage point of behavioral inference. There is no guarantee that an individual's claim to a particular level of self-esteem has any correspondence to that person's actual feelings of self-worth. (Turkat 1978, p. 130).

The Bank Street College of Education report (1976, p. 96) stated that many factors affect the measurement of self-esteem, including

> the person's ability to read and understand the items, . . . the degree of insight he actually has about his own feelings on the matters discussed in the inventory's statements, the specific phrasing and form of presentation of inventory items, and their tendency to invite particular kinds of responses.

In spite of these difficulties, they contended that self-esteem is still an important concept. An attempt at measurement appears to be warranted.

Thus, self-esteem was included in the present study, as a measure of individual value preferences. In addition to the semantic differential self-ideal discrepancy score, two other measures were obtained for comparative purposes: the Ro-

senberg Self-Esteem Scale and the Sliding Person Scale. These three measures were correlated with each other, and with academic achievement.

Statement of the Problem

The present study focused on exploring the differential value systems of Indian high school students, as they relate to educational achievement. Values of low and high achieving Indian students were compared with each other, and with those of their non-Indian teachers.

The hypotheses for the present study were:

1. There are differences between the character traits valued by low achieving and high achieving Indian students.
2. The character traits valued by high achieving Indian students will relate more closely to those preferred by their teachers, than will the character traits valued by low achieving Indian students.
3. Reported perceptions of themselves, ideal self, and others will differentiate between low achieving and high achieving Indian students.
4. The reported perceptions of themselves, ideal self and others of high achieving Indian students will correspond more closely to those of their teachers, than will the perceptions of low achieving Indian students.

5. Measures of participation in traditional Indian activities will positively relate to educational achievement.
6. High achieving Indian students will rate THE AVERAGE INDIAN more favorably than low achieving Indian students.

In addition to these specific hypotheses, the relationship between self-esteem and academic achievement was explored, using three measures of self-esteem. In exploring self-esteem, the responses of Indian students were compared with those of non-Indian students.

Method

Subjects

Subjects were recruited from seven rural schools which were located on or near three North Dakota Indian reservations. The seven schools varied in terms of percentage of Indian students. Two schools consisted of predominantly white student populations, and three schools had predominantly or exclusively Indian student populations. The remaining two schools were more equal in terms of distribution of Indians and non-Indians in the student population (see Table 1).

TABLE 1

Student Population by School

School	Indian	Non-Indian	All Students
1	36	0	36
2	91	89	180
3	19	63	82
4	27	31	58
5	90	21	111
6	25	43	68
7	40	24	64
Total	328	271	599

High school students in grades nine through twelve and their teachers were assessed in group testing sessions. Table 2 arranges the student population by grade level.

TABLE 2

Student Population by Grade Level

Grade	Indian	Non-Indian	All Students
9	98	61	159
10	81	63	144
11	74	69	143
12	75	78	153
Total	328	271	599

Table 3 presents the breakdown of the total subject population by sex.

TABLE 3

Subject Population by Sex

	Male	Female	Both Sexes
Indian Students	156	172	328
Other Students	126	145	271
Teachers	35	29	64
Total	317	346	663

A total of 328 Indian students served as subjects: 98 ninth graders, 81 tenth graders, 74 eleventh graders and 75 twelfth graders. There were 156 males and 172 females in the Indian student sample.

A frequency table of Indian students by tribe was generated, in order to determine the representation of tribal groups in the student sample. As revealed in Table 4, the majority of Indian students who were sampled identified themselves as members of the Chippewa tribe. There were 117 students who identified themselves as Chippewas. However,

119 students identified themselves as members of the Three Affiliated Tribes, either of a single tribal group (Arikara, Hidatsa or Mandan) or a combination thereof. There were 37 students who identified themselves as Sioux. The remaining students noted various combinations of Indian tribal groups in their ancestry.

TABLE 4

Indian Student Tribal Frequencies

Tribe	Frequency
Chippewa	117
Sioux	37
Hidatsa	32
Arikara	31
Three Affiliated	20
Arikara/Sioux	13
Hidatsa/Mandan	12
Mandan	11
Arikara/Hidatsa	11
Hidatsa/Sioux/Mandan	6
Mandan/Sioux	5
Chippewa/Sioux	4
Hidatsa/Cree	4
Arikara/Mandan	2
Hidatsa/Chippewa	2
Other Single Tribe	5
Other Mixtures	8

An examination of the tribal affiliation data reveals that all major Indian tribal groups in North Dakota were represented. However, the representation of Indian tribes in the study is not proportionally the same as tribal group populations in North Dakota. According to Schneider (1981), the most populous tribal group whose members live on or near

North Dakota reservations is the Chippewa, followed by the Sioux and then members of the Three Affiliated Tribes (Arikara, Hidatsa or Mandan). In this study, the heaviest representation was of the Three Affiliated Tribes, followed closely by the Chippewa. Therefore, the results do not necessarily reflect those which might have been attained if the sample had been truly representative of North Dakota Indians. Rather, the sample consisted of Indian students from those schools whose administrators granted permission for the study to be conducted.

Non-Indian students attending the seven schools were also tested. A total of 271 non-Indian students took part in the study: 61 ninth graders, 63 tenth graders, 69 eleventh graders and 78 twelfth graders. There were 126 males and 145 females in the non-Indian student sample.

It should be noted that the non-Indian students are not representative of all non-Indian students in North Dakota. Many of the sampled non-Indian students had lived on an Indian reservation, and they all attended schools where Indians were in attendance. No attempts were made to control for socioeconomic variables or for parental educational levels. In this regard, the study was more descriptive than experimental in nature. It focused on surveying those students found at the various schools, rather than creating experimental groups.

Sixty-four teachers also served as subjects. There were 35 male teachers and 29 female teachers. Five of the teachers identified themselves as Indian.

Missing data was a problem in the present study. Those students or teachers who were absent from school on the day of testing were not included in the study. In addition, some subjects did not respond to all task requirements, completed forms incorrectly, or failed to return the questionnaires. Only those tasks which were correctly and fully completed were used in the analyses.

Out of a combined school enrollment of 710, 599 students, or 84%, were represented in the study. Of the total teacher population, 64 out of 82, or 78%, were surveyed.

Instruments

Several sources of data were used in the current study. These included a Personal Data Form, information from school records, a Character Evaluation Test, a Concept Differential, and a Sliding Person Scale. The Rosenberg Self-Esteem Scale was also used. Each of the sources of data will be described below.

Personal Data Form.

A Personal Data Form was constructed to obtain descriptive and behavioral self-report information from each of the students. A separate form was constructed for the teachers. These forms are reproduced in Appendices A and B, respectively.

Grade Point Averages (GPAs).

For each student, four course grades for the previous (1980-1981) school year were obtained from school records. Course grades in English, math, social studies and science were recorded.

Grades for these particular courses were selected because they are among the courses required for high school graduation by the North Dakota State Department of Education. As such, they tend to be relatively stable across school districts. The other required courses, Driver's Education and Physical Education, were excluded because they are not graded in all school districts.

Individual grade point averages (GPAs) were determined by averaging course grades. Those courses which a student had taken were assigned a numeric value based on a four point scale, according to course grade. The values were then summed and divided by the total number of courses which had been taken.

Using this method, it was possible to obtain GPAs for 276 of the 328 Indian students, and for 248 of the 271 non-Indian students. Missing data resulted from one of three possibilities: 1. The student had not attended school the previous year, 2. The student had attended a non-graded school the previous year, or 3. The student had attended another school which had not forwarded student records.

Achievement Test Records.

As an additional measure of academic achievement, school records were examined to determine if a common standardized achievement test had been given across school districts. It was discovered that 170 of the 328 Indian students and 154 of the 271 non-Indian students had taken the Iowa Tests of Educational Development: SRA Assessment Survey (SRA) during one of the two previous school years. Since this achievement test appeared to be the most stable across school districts, the composite score on this test was recorded for each student. Each score was recorded in the form of a percentile, according to grade level. Therefore, a student in the tenth grade could be compared with an eleventh grader, as both of their scores represented standings in their respective classes.

The inclusion of a standardized achievement test in the present study resulted from the research of authors such as Malpass (1953), who noted that "school grades are subjective (teacher) ratings of students' class work, while standardized achievement tests provide a more objective measure of how much a student knows . . . regardless of such factors as . . . personality traits, age, or ability to get along with others" (Malpass 1953, p. 479). Specifically, Malpass found that New York public school system students who tended to dislike school also tended to receive poor marks from their teachers, although they did not necessarily perform more poorly on standardized achievement tests.

Reviews of the SRA by Milholland (1978) and Lindvall (1978) were both generally favorable. The test, designed to assess "such general abilities as reading with comprehension, expressing oneself in writing, displaying a fundamental command of the concepts and applications of mathematics, and having a basic background in the natural sciences", was lauded for its inclusion of competencies needed in daily living (Lindvall 1978, p. 59). Lindvall (1978, p. 60) concluded his review by remarking that the SRA is "a well-conceived testing instrument, carefully planned and produced, that has satisfactory reliability and useful norms."

Missing achievement test data in the present study resulted from one of the following possibilities: 1. The student had not attended a school which had given the test, 2. The student had been absent on the day of testing, or 3. The student had attended a school which had given the test, but had not forwarded its records.

Attendance.

For each student, days in attendance and days on record for the previous (1980-1981) school year were obtained from school records. Attendance percentages were computed by dividing the total number of days a student had attended school by the number of days enrolled in a particular district. Students who had transferred into a school during the previous school year received percentages based solely on attendance at the school where presently enrolled, unless

school records were available from the previously attended school. In the latter case, total enrollment and attendance figures were derived, and attendance percentages were computed.

A total of 286 of the 328 Indian students and 264 of the 271 non-Indian students were given attendance percentages. Missing data resulted from one of the following reasons: 1. The student had not attended school the previous year, 2. The student had attended a school which did not keep attendance records, or 3. The student had attended a school which did not forward its school records.

Self-esteem and Value Differential.

An instrument based on the semantic differential technique of Osgood, Suci and Tannenbaum (1957) was constructed to provide information on reported perceptions of the self, ideal self and others.

It has been stated that the semantic differential is the "most common single method of measurement to be found in published cross-cultural research" (Brislin, Lonner & Thorndike 1973, p. 243). The popularity of the semantic differential results from its purportedly culture-free orientation. As Havighurst (1970b) noted, the technique is easy to use with those who don't read English very well, as the language used in a semantic differential is elementary. The technique consists of rating a number of concepts on scales of bipolar adjectives. The resulting vector locates each concept in semantic space.

Researchers have generally found three dominant, orthogonal factors which comprise the semantic differential ratings: an evaluative factor, a potency factor and an activity factor. The evaluative factor is usually the most salient. Together, the three factors account for about fifty to sixty percent of the variance.

In choosing concepts for the Self-esteem and Value Differential, concepts were selected from studies by Dreyer (1970) and Church (1978), both of whom had used semantic differentials with high school students. Six concepts were selected: THE AVERAGE INDIAN, THE AVERAGE WHITE PERSON, TEACHERS AT THIS SCHOOL, STUDENTS AT THIS SCHOOL, MYSELF, and THE KIND OF PERSON I WOULD LIKE TO BE.

As can be seen from the selection of concepts, two of the concepts, when juxtaposed, could be used as a measure of self-esteem (MYSELF versus THE KIND OF PERSON I WOULD LIKE TO BE). Two of the concepts, when juxtaposed, might relate more to perceptions of value differences (THE AVERAGE INDIAN versus THE AVERAGE WHITE PERSON). Two sets of bipolar adjectives were chosen: one set to reflect self-esteem, and another set to reflect cultural value differences.

The statements and categories of the Tennessee Self-Concept Scale (Fitts 1964) were utilized in the construction of the Self-Esteem and Value Differential, in order to choose adjectives which would measure self-esteem. The Tennessee Self-Concept Scale is a self-report instrument designed to

measure self-concept, and has been widely used in research. Developed and normed on the majority population, the possibility of cultural bias in this instrument, as in similar measurements, may make comparisons between Indian and non-Indian groups inappropriate (Dreyer & Havighurst 1970). In particular, the scoring key may not accurately reflect the influence of cultural variables (Oanh & Michael 1977).

However, the categories of self-concept seem to be applicable to Indian students. The five general categories of the Tennessee Self-Concept Scale are: Physical Self, Moral-ethical Self, Personal Self, Family Self and Social Self. In addition to these categories, a sixth category, School Related Self, was created for the purposes of this study.

For each of these categories, an adjective pair was selected for inclusion in the Self-esteem and Value Differential. In adjective selection, individual statements of the Tennessee Self-Concept Scale were first examined, and listings were made of adjectives by categories. These listings were compared with the adjective pairs researched by Osgood, May and Miron (1975). Corresponding adjective pairs were selected. Whenever possible, at least one adjective had been used in a Tennessee Self-Concept Scale statement.

As an additional criteria for adjective selection, scale loadings of at least .76 on the evaluative factor, as reported by Osgood, May and Miron (1975), were required for each adjective pair. Adjectives with heavy evaluative load-

ings were chosen because self-esteem has to do with evaluation. As Beane and Lipka (1980) noted, self-esteem measurement involves the positive or negative value the person brings to his or her definition of self.

The categories, and adjectives chosen to represent each category, are listed below:

Self-Concept Category	Adjective Pair
Physical Self	beautiful - ugly
Moral-ethical Self	good - bad
Personal Self	happy - sad
Family Self	valuable - worthless
Social Self	kind - cruel
School Related Self	smart - dumb

Differences between ratings of SELF and THE KIND OF PERSON I WOULD LIKE TO BE served as a measurement of self-esteem. Using the semantic differential in this way allowed Indian students to establish their own scoring keys. Their ideal self answers constituted the keys, against which their self answers were scored.

As previously stated, The Self-esteem and Value Differential was also constructed to provide information about perceived differences in Indian and non-Indian values. In order to select adjectives relating to value differences, the literature was surveyed to determine ways in which Indians have typically been represented.

Although there are vast differences between tribes, and even within members of a tribe, certain characteristics have commonly been attributed to Indian people. A listing of some of these characteristics, including authors who have cited their importance, is presented below. Bipolar adjective pairs were selected to represent each characteristic, and are also included.

Characteristic	Adjective Pair
Stoic bravery (Bryde 1971)	brave - cowardly
Individual freedom (Bryde 1971)	independent-dependent
Relaxed attitude (Dozier 1971)	relaxed-tense
Generous (Roessel 1971)	giving - taking
Cooperative (Roessel 1971)	cooperation - competition
Reserved (Spindler & Spindler 1957)	cautious-risky

To the extent that these traits are perceived as representing Indian values, it was expected that the students and teachers would produce different ratings for THE AVERAGE INDIAN and THE AVERAGE WHITE PERSON.

All bipolar adjectives were randomly assigned to the first or last position on a seven-point scale. They were then randomly ordered. Directions for the task were modified versions of those used by Dreyer (1970). The task, with directions, is presented in Appendix C.

Character Valuation Test.

The Character Valuation Test was constructed in a paired comparison format in an attempt to assess which character traits were most valued by teachers of Indian students and groups of high and low achieving Indian high school students.

The categories of the Tennessee Self-Concept Scale (Fitts 1964) were again utilized to assure the selection of character traits which would reflect different aspects of the total self. As in the Self-esteem and Value Differential, a sixth category, School Related Self, was also utilized. Two adjectives for each of the Tennessee Self-Concept Scale categories were selected.

The Tennessee Self-Concept Scale contains three types of statements in each category: those to assess identity, those to assess self-satisfaction, and those to assess behavior. In the present task, self-satisfaction was considered to be irrelevant. The Character Valuation Test was not constructed as a self-esteem measure, but as a measure to assess preferred characteristics. However, identity (what a person is) and behavior (what a person does) were considered to be relevant. Therefore, one adjective describing identity and one adjective describing behavior were selected for each category. This selection minimized the possibility that a particular category might be ranked higher than another due to a value preference for a "doing" adjective rather than a "being" adjective.

As in all paired comparison tasks, the possibility remains that a particular adjective might have been chosen over another mostly because of its attractiveness. However, if one adjective was more or less attractive, it should have been ranked in the same manner by all respondents. Ranking of other adjectives, and distances between adjectives, would still have been variable.

In selecting adjectives, statements from the Tennessee Self-Concept Scale were examined. Adjectives from these statements were compared with the adjectives used by Comeau (1980) and Rokeach (Cohen 1976). Those adjectives found in two or more of these sources were selected. The twelve adjectives, and the categories they represent, are listed below:

Self-Concept Category	Identity	Behavior
Physical Self	attractive	athletic
Moral-ethical Self	honest	dependable
Personal Self	cheerful	independent
Family Self	important	generous
Social Self	popular	understanding
School Related Self	intelligent	logical

Each item was randomly paired with four other items. In two of the pairings, each item was listed first, and in the final two pairings the item was listed last. This procedure yielded a total of 24 comparisons. Each comparison was then placed on a seven-point scale. The task, with directions, is presented in Appendix D.

Sliding Person Scale.

To provide a nonverbal measure of self-esteem, a modified version of Karmos' (1979) Sliding Person Scale was administered. The Sliding Person Scale was originally devised as a wooden manipulative task consisting of a fixed profile of a person, representing "ideal self", and a sliding profile, representing "real self." Subjects were asked to move the sliding profile, so that the distance between the sliding profile and the fixed profile would indicate how far they were from their "ideal self." Later modifications converted the original measure into a paper-and-pencil instrument. The obtained score for either version of the Sliding Person Scale was defined as the measurement, in centimeters, between the subject's self and his or her ideal self.

Karmos (1979) claimed that the Sliding Person Scale is independent of cultural values and suggested its experimental use. Test-retest and alternate form reliabilities of .57 to .95 were reported.

Karmos and Karmos (1979) declared that the Sliding Person Scale is superior to many verbal self-esteem measures, since its content is not verbally defined in terms of specific items. To determine its construct validity, they correlated the Sliding Person Scale with six other measures. They discovered that the Sliding Person Scale correlated highly with social desirability, social adjustment, and emotional adjustment measures. Smaller self-ideal discrepancies tended to correspond to higher scores in these areas.

The modified response form used in the present study consisted of a sheet of paper which was blank except for the subject number in the upper right-hand corner, and a small square in the lower left-hand corner. The following directions were read orally to the students:

> On this sheet of paper, you see a square labeled "ideal self." Your ideal self is the person you would like to be. I want you to pick up the penny that you find in your packet of materials. Use the penny to stand for yourself. Place the penny on the sheet of paper, to show how far you think you are from your ideal self - from being the person you would most like to be. Do not go off the paper. When you have placed the penny, take your pencil and trace around it.

Rosenberg Self-Esteem Scale.

For comparative purposes, the Rosenberg Self-Esteem Scale (Rosenberg 1965) was included in the present study. Robinson and Shaver (1973) noted that the scale was originally devised for high school students, and purportedly measures self-acceptance. The test consists of ten statements, to which subjects are asked to indicate agreement or disagreement using a four-point scale. Obtained test-retest correlations of .85 over two weeks and Guttman scale reproducibility coefficients of .92 have been reported (Robinson & Shaver 1973). Among the test's strengths are its brevity and its high reliability. However, its forced choice format and small number of items "are likely to produce only gross, ordinal distinctions among people" (Robinson & Shaver 1973, p. 82).

Procedure

In an attempt to foster teacher cooperation, a meeting was conducted at each school for all high school teachers before class on the day of testing. In the group meeting, the teachers were read a written statement which attempted to elicit their permission and cooperation (see Appendix E).

The rationale for the study was presented, and individual privacy was insured. The teachers were told that they would be informed of the results of the study. They were also given the opportunity to ask questions pertaining to the study.

All sessions were conducted in a common meeting area, such as the school cafeteria. The student body at the three smaller schools was surveyed in its entirety. Students at the four larger schools were surveyed by grade level. Each session lasted approximately one hour.

At the beginning of each session, the students and teachers were told:

> We wish to find out more about the students and teachers in this high school. Today, we would like you to answer some questions about your life, and about what is important to you. Please answer honestly, so that we can learn how you really think and feel about different things. Your teachers, parents or fellow students will not know how you, as an individual, answered any questions; these answers will be kept secret. Please do not compare your answer with anyone else's.

Each student was given a packet of materials containing the test directions and answer sheets. In order to minimize the effects of reading ability on task performance, all di-

rections were read orally by the examiner. A blackboard was used to illustrate directions when questions arose. The procedures were administered in the following order:

1. Task 1: School Record Sheet
2. Task 2: Rosenberg Self-Esteem Inventory
3 Task 3: Character Valuation Test
4 Task 4: Self-esteem and Value Differential
5. Task 5: Sliding Person Scale

Following these five tasks, a drawing task was administered. The results of this task were not analyzed with the rest of the data.

Results

Academic, Demographic and Social Information

Teachers.

Analysis of the data on the 64 teachers revealed that the average teacher age was 34.70, ranging from 23 to 61 years (SD=8.94). The average number of years a teacher had taught Indian students was 6.14, ranging from 0 to 30 years (SD=5.50). The mean for total years spent in teaching was slightly larger: 8.86 years, ranging from 0 to 30 years (SD=6.80).

Indian Students.

Analysis of the data on the Indian students revealed a mean age of 15.65, ranging from 13 years old to 20 years old (SD=1.26). The Indian students reported living on a reservation from 0 to 19 years, averaging 9.04 years (SD=6.42).

Non-Indian Students.

The non-Indian student data revealed a mean age of 15.12 years, ranging from 13 years to 18 years (SD=1.20). The non-Indian student had lived on a reservation, on the average, for 6.87 years; the range was from 0 to 18 years (SD=6.87).

Indian and Non-Indian Student Comparisons.

Comparisons of the Indian and non-Indian student data revealed that the two student groups differed significantly with respect to several variables. The significant results are summarized in Table 5.

TABLE 5

Personal Data: Indian vs. Non-Indian Students

Variable	Indian	Non-Indian	T
Grade	10.38	10.60	-2.38*
Reservation years	9.04	6.84	3.96**
Reservations visited	3.90	2.17	5.94**
School activities	3.50	4.44	-4.94**
Siblings	5.44	3.64	8.19**
Household members	6.00	4.80	6.82**
GPA	1.74	2.64	-10.85**
SRA	30.28	52.87	-8.30**
Attendance	91.10	95.11	-7.44**

*p<.05
**p<.001

Relative to non-Indian students, the Indian students reported having lived more years on a reservation, and having visited more reservations. They reported more siblings, on the average, and reported more people in their households. Their attendance figures, GPAs, and performances on the SRA achievement test were lower. When the class standings of Indian and non-Indian students were averaged, there were more Indian students who were freshman or sophomores. Finally, Indian students tended to indicate less participation in extra-curricular school activities.

There were no significant differences between Indian and non-Indian student groups in age or sex. The fact that age was not significantly different may be contrasted with the finding that there were more Indian students in the lower grades. Apparently, there were more Indian students at the lower grade levels who were older than average.

High and Low Indian Groupings.

The present study was partially constructed to compare responses between high and low achieving Indians. In order to do this, GPA was utilized as the primary measure of academic achievement. This measure was chosen because almost all students had received grades, whereas fewer students had taken the SRA achievement test. However, SRA was utilized to check some of the results obtained with GPA.

It should be noted that the student high and low groupings by GPA were not drawn from the same population as the groupings by SRA. This was due to the fact that not all school districts used the SRA, and not all students had GPAs. However, the SRA and GPA groupings may be regarded as subsets from the general study population.

Frequency tables of Indian student GPA and SRA were generated, and high and low groups were identified. Following the method utilized by Johnson (1977), those students who achieved scores in the upper quartile were designated as "high achievers"; those students whose scores fell in the lower quartile were designated as "low achievers."

It was necessary to utilize some fairly low cut-offs for the high achieving groups. This was because the distributions of both GPA and SRA were positively skewed. Indian students attaining a GPA of 2.50 or higher, or falling above the 45th SRA percentile, were defined as high achievers. These groupings may be justified on the grounds that, among Indian students, so-defined high achievers are in the upper quartile. However, it should be recognized that these definitions of "high achievers" are not those commonly used in studies of school populations.

Because Indian student GPAs did not divide into four equal groups using the quartile method, there were 81 students who were identifed as being within the lower quartile, and 70 students who were identified as being within the upper quartile. The responses of these students were used in high and low group analyses. For the SRA achievement groups, 43 students were identified as being in the low achieving quartile, and 41 students were identified as being within the high achieving quartile.

In order to determine the salient demographic variables which distinguished Indian students with low GPAs and Indian students with high GPAs, t test comparisons were made. Table 6 presents the results of the significant comparisons between high and low GPA Indian students. Indian students who had low GPAs tended to be older. They reported more involvement in pow wows, and reported having attended fewer

schools. They also indicated that they were less interested in graduating from high school and going to college. Finally, those Indian students with low GPAs also had lower school attendance percentages.

TABLE 6

Differences between Low and High GPA Indian Students

Variable	Low	High	T	P
Age	15.90	15.44	2.34	.021
Total Schools	3.17	4.43	-3.27	.001
Pow Wows	2.75	2.24	2.78	.006
Graduate	3.44	3.89	-4.72	*
College	1.53	1.17	5.00	*
Attendance	88.46	99.36	-4.93	*

*p<.001

High and low GPA Indian students did not differ significantly with respect to grade, sex, number of siblings, number of household members, knowledge of an Indian language, attendance at give aways, and number of reservations visited.

T test comparisons between those Indian students with low and high SRA scores were also made. Like the low GPA students, the low SRA students tended to report attendance at fewer schools, and tended to be less interested in graduating from high school and going to college. However, unlike the low GPA Indian students, the low SRA students reported more siblings and more people living in their households than the high SRA students. There were also more males in

the low SRA group. Table 7 presents the significant results of comparisons between high and low SRA Indian students.

TABLE 7

Differences between Low and High SRA Indian Students

Variable	Low	High	T	P
Sex	1.37	1.74	-3.73	*
Total Schools	2.88	4.84	-4.01	*
Siblings	6.23	4.53	2.26	.026
Household members	7.03	5.62	2.27	.026
Graduate	3.25	3.93	-4.61	*
College	1.49	1.07	4.74	*

*p<.001

The SRA groups did not differ significantly with respect to grade, knowledge of an Indian language, attendance at give aways, and number of reservations visited. These results are similar to those obtained with high and low GPA Indian groups. However, unlike the high and low GPA Indian groups, the SRA groups did not differ with respect to attendance at school, attendance at pow wows, and age.

Indian students were also selected for high and low groups based on school attendance. As with GPA and SRA, the upper and lower quartiles were used to identify student groups.

Indian students in the low and high attendance groups were compared on the demographic variables. Table 8 presents the significant comparisons which were attained.

TABLE 8

Differences between Low and High Attending Students

Variable	Low	High	T	P
Age	15.95	15.10	4.23	*
Grade	2.68	2.03	3.59	*
Total Schools	2.89	3.90	-2.51	.013
Pow Wows	2.82	2.24	3.23	.002
College	1.44	1.25	2.43	.016
GPA	124.03	225.03	-5.81	*

*p<.001

The results of the t test comparisons by attendance reveal many similarities, in significance and direction, to the comparisons by GPA and by SRA. As was found with GPA, age, total schools attended, pow wow attendance, and interest in college are all significant. As was found with SRA, grade, total schools attended, and interest in attending college after high school graduation are significant.

This section has presented some demographic findings, and has described the formation of high and low comparison groups within the Indian student population. In the following pages, findings pertinent to the six specific hypotheses of the study will be presented. The final section will examine the relationship between measures of self-esteem and academic achievement.

Hypothesis One

There are differences between the character traits valued by low achieving and high achieving Indian students.

The character traits were scaled by the Clark method of pair-comparisons (Clark 1977). This scaling procedure uses the least squares principle to generate a set of simultaneous equations. When these equations are solved, a scale point for each trait is produced. This results in the creation of a scale for any given group.

This statistical procedure also yields an index of reproducability for each scale which is constructed. This index measures how well each scale predicts back to the original data. A significance level can be attached to the index, which determines whether the scale is signicantly different from one that might be produced if there were no differences between scale points.

In addition, two or more scales may be compared, using an analysis of variance approach. This procedure determines the degree of difference by which one group scales the items as compared with another group.

In the present study, three scales were constructed. One scale reflected teacher responses. The other scales consisted of responses elicited from high achieving Indian students and low achieving Indian students. Achievement was defined in terms of GPA.

To test the first hypothesis, the scales for high and low achieving Indians were examined. Table 9 lists the ordering of the traits for high and low GPA Indian students, with scale points. The indices of reproducibility for the high GPA and the low GPA scales were both significant at the .001 level (Low GPA: F = 19.51), r = .34; High GPA: F = 26.56, r = .39). These indices indicate that those Indian students grouped as either low or high achievers were consistent with each other and with themselves in ranking the adjectives.

TABLE 9

Character Trait Scales: Low vs. High GPA Indian Students

Low GPA	Point	High GPA	Point
honest	5.2	honest	6.9
dependable	4.4	dependable	5.7
understanding	2.8	intelligent	3.7
generous	2.3	understanding	2.8
athletic	1.0	independent	.6
intelligent	.4	generous	.5
independent	-1.2	athletic	-.3
important	-2.1	logical	-1.8
cheerful	-2.2	cheerful	-3.5
attractive	-2.2	attractive	-3.8
logical	-3.9	important	-3.9
popular	-4.2	popular	-5.9

Using an F test, these two scales were found to be significantly different from each other. Table 10 tabulates the results of this analysis.

TABLE 10

Low GPA vs. High GPA Character Trait Preferences

Source	DF	SS	MS	F	P
Model	11	1074.4	97.2	43.88	.001
Error	3277	7293.6	2.2		
Total	3288	8368.0			

Hypothesis Two

The character traits valued by high achieving Indian students will relate more closely to those preferred by their teachers, than will the character traits valued by low achieving Indian students.

A scale was generated for the teachers' responses to the Character Valuation Test. This scale had an index of reproducability of .61 ($F = 77.81$, $p<.001$). When compared with the reproducibility indices of the high GPA or low GPA Indian students, the teachers were more consistent with each other and with themselves in comparing adjectives. However, all three groups were consistent enough to produce scales which were not random.

Table 11 lists the teachers' individual scale points and those of the low GPA Indian achievers. Table 12 lists the teachers' scale points and those of the high achievers.

Table 13 shows the comparison between the teachers' scale and that of the low achievers. This comparison revealed that the two scales were significantly different from each other. Table 14 shows the results of the comparison between

TABLE 11

Character Trait Scales: Teachers vs. Low GPA Indians

Teachers	Point	Low GPA	Point
honest	13.5	honest	5.2
dependable	9.4	dependable	4.4
understanding	7.2	understanding	2.8
intelligent	5.2	generous	2.3
logical	1.5	athletic	1.0
generous	1.1	intelligent	.4
independent	.3	independent	-1.2
cheerful	-2.8	important	-2.1
athletic	-7.3	cheerful	-2.1
attractive	-9.2	attractive	-2.2
popular	-9.4	logical	-3.9
important	-9.6	popular	-4.2

TABLE 12

Character Trait Scales: Teachers vs. High GPA Indians

Teachers	Point	High GPA	Point
honest	13.5	honest	6.9
dependable	9.4	dependable	5.7
understanding	7.2	intelligent	3.7
intelligent	5.2	understanding	2.8
logical	1.5	independent	.6
generous	1.1	generous	.5
independent	.3	athletic	-.3
cheerful	-2.8	logical	-1.8
athletic	-7.3	cheerful	-3.5
attractive	-7.3	attractive	-3.8
popular	-9.4	important	-3.9
important	-9.6	popular	-6.9

the scales of teachers and high achievers. These two scales were also significantly different from each other.

In order to determine if the high achievers were closer to the teachers in their responses to the Character Valuation Test than the low achievers, standardized comparisons

TABLE 13

Teachers vs. Low GPA Character Trait Preferences

Source	DF	SS	MS	F	P
Model	11	60.8	160.4	72.63	.001
Error	3109	6866.6	2.2		
Total	3120	8631.0			

TABLE 14

Teachers vs. High GPA Character Trait Preferences

Source	DF	SS	MS	F	P
Model	11	2144.9	195.0	87.53	.001
Error	3037	6766.1	2.2		
Total	3048	8911.0			

were made. The distance between the teachers and the high achievers was 11.55; the distance between the teachers and the low achievers was 17.78. Therefore, the teachers and the high achievers were closer together than the teachers and the low achievers.

Hypothesis Three

Reported perceptions of themselves, ideal self and others will differentiate between low achieving and high achieving Indian students.

Concept Ratings by GPA.

In order to determine if there were significant differences between the concept ratings of high and low achieving Indian students, a statistic known as Hotelling's T Squared

(Kerlinger & Pedhazur 1973) was utilized. The Hotelling's T Squared is a multivariate analog of the student's t statistic. This statistic may be used when differences are sought between two groups, as measured by a set of variables. The Hotelling's T Squared assists in controlling for correlations among variables, and thus decreases the probability of finding a chance significance.

A Hotelling's T Squared analysis of the six sets of scales in the Self-esteem and Value Differential was used to determine if there were significant differences between low achieving and high achieving Indian students. High and low achievers were defined by GPA. The Hotelling's T Squared test was accomplished by the equivalent procedure of predicting the high and low classifications from the 72 items. As shown in Table 15, significant results were achieved for the analysis.

TABLE 15

Combined Items: Low vs. High Indian Achievers

Source	DF	SS	MS	F	P
Model	72	23.82	.33	2.23	.001
Error	55	8.17	.15		
Total	127	31.99			
R = .86					

In order to discover which semantic differential items were contributing the greatest amount to the differences between the high and low achievers' ratings, t tests on the

individual ratings were performed. Significant findings are recorded in Table 16.

TABLE 16

Individual Items: Low vs. High Indian Achievers

Variable	Low	High	T
Teachers			
risky-cautious	4.15	3.50	2.11*
dumb-smart	3.61	2.91	2.33*
Students:			
risky-cautious	4.41	5.01	-2.29*
bad-good	3.48	3.98	-1.99*
tense-relaxed	3.46	3.99	-2.07*
giving-taking	3.99	3.46	2.16*
Myself:			
dependent-independent	4.08	3.04	3.47***
dumb-smart	3.16	2.29	4.23***
Ideal Self:			
dependent-independent	3.39	2.50	2.52***
sad-happy	2.11	1.64	2.25*

*p<.05
**p<.01
***p<.001

In order to interpret the table, it should be noted that all adjective pairs were scored on a 1 to 7 point scale. A score of 4 is at the midpoint, and indicates that neither adjective is considered to be more salient. Any score falling above 4 indicates a higher rating for the adjective listed first; any score falling below 4 indicates a higher rating for the adjective listed last.

High achievers tended to see TEACHERS AT THIS SCHOOL as being cautious, whereas low achievers rated TEACHERS AT THIS SCHOOL as risky. High achievers rated TEACHERS AT THIS

SCHOOL as being smarter, although both high and low achievers indicated that TEACHERS AT THIS SCHOOL were smart. High achievers also tended to see TEACHERS AT THIS SCHOOL as being more cooperative.

For STUDENTS AT THIS SCHOOL, there were four significant comparisons. Both high and low achievers saw STUDENTS AT THIS SCHOOL as risky, but the high achievers rated STUDENTS AT THIS SCHOOL higher on this trait. The high achievers also rated STUDENTS AT THIS SCHOOL as being less relaxed, less good, and less taking.

In rating themselves, the high achievers tended to see themselves as being more independent than the low achievers. They also placed themselves closer to the smart side of the dumb-smart continuum. It should be noted that of all the Self-esteem and Value Differential responses, these two ratings had the highest significance levels attached to them in distinguishing high and low achievers.

Finally, comparisons between ratings of THE KIND OF PERSON I WOULD LIKE TO BE, or ideal self, revealed two significant differences. High achievers described the ideal self as being more independent and more happy than did low achievers.

It should be noted that individual item ratings of THE AVERAGE INDIAN and THE AVERAGE WHITE PERSON did not significantly differentiate between high and low achievers.

Distance Scores by GPA.

Distance scores between the Self-esteem and Value Differential's six concept ratings were computed for each subject. These distance scores measure the degree of congruency between each subject's perceptions on one measure, and his or her perceptions on another measure. The statistic used to determine the degree of congruency is known as Cronbach's D (Nunnally 1967). A small distance between the two measures reflects a congruent set of perceptions. The greater the distance between the two measures, the more incongruence.

Using all possible combinations, a total of fifteen distances were obtained, as follows:

1. MYSELF - THE KIND OF PERSON I WOULD LIKE TO BE
2. THE AVERAGE INDIAN - THE KIND OF PERSON I WOULD LIKE TO BE
3. THE AVERAGE WHITE - THE KIND OF PERSON I WOULD LIKE TO BE
4. MYSELF - THE AVERAGE INDIAN
5. MYSELF - THE AVERAGE WHITE PERSON
6. TEACHERS AT THIS SCHOOL - THE KIND OF PERSON I WOULD LIKE TO BE
7. STUDENTS AT THIS SCHOOL - THE KIND OF PERSON I WOULD LIKE TO BE
8. MYSELF - TEACHERS AT THIS SCHOOL
9. MYSELF - STUDENTS AT THIS SCHOOL
10. THE AVERAGE INDIAN - THE AVERAGE WHITE PERSON

11. TEACHERS AT THIS SCHOOL - STUDENTS AT THIS SCHOOL
12. THE AVERAGE TEACHER - THE AVERAGE WHITE PERSON
13. THE AVERAGE TEACHER - THE AVERAGE INDIAN
14. STUDENTS AT THIS SCHOOL - THE AVERAGE WHITE PERSON
15. STUDENTS AT THIS SCHOOL - THE AVERAGE INDIAN

In this part of the analysis, the distance between MYSELF and THE KIND OF PERSON I WOULD LIKE TO BE was not utilized. This distance has been previously defined as a measure of self-esteem, and was used with other self-esteem measures in a separate set of analyses.

The rest of the distance scores were assessed for each Indian student. High and low achievement groupings were then determined according to GPA, and a Hotelling's T Squared analysis was performed. As presented in Table 17, the results of the analysis significantly differentiated high and low achieving Indian students.

TABLE 17

Combined Distances: Low vs. High Indian Achievers

Source	DF	SS	MS	F	P
Model	14	6.25	.45	1.94	.03
Error	134	30.87	.23		
Total	148	37.11			
R = .41					

Comparisons between individual distance scores were also performed, in order to determine which scores were contributing the greatest amount to the Hotelling's T Squared.

These comparisons yielded two significant results. As recorded in Table 18, high achievers tended to place more distance between THE KIND OF PERSON I WOULD LIKE TO BE and THE AVERAGE INDIAN. High achievers also placed more distance between THE KIND OF PERSON I WOULD LIKE TO BE and STUDENTS AT THIS SCHOOL.

TABLE 18

Individual Distances: Low vs. High Indian Achievers

Variable	Low	High	T
AVERAGE INDIAN vs. IDEAL SELF	5.90	7.43	-2.83*
STUDENTS vs. IDEAL SELF	7.39	8.93	-2.61*

*p<.01

Concept Ratings and Distance Scores by SRA.

For comparative purposes, high and low achievers were determined by SRA, and the individual concept ratings and distances between concepts were tested with the use of the student's t. Table 19 presents the results of this set of analyses.

In comparison, many more items attained significance using the SRA based groups than using the GPA based groups. However, of the five items which achieved significance for both SRA and GPA based groups, the direction of the significance was the same. High GPA and high SRA students were

TABLE 19

Individual Items and Distances: Low vs. High SRA

Variable	Low	High	T	P
Average Indian:				
beautiful-ugly	5.13	4.60	1.94	.055
dumb-smart	2.73	3.40	-2.49	.015
competitive-cooperative	3.33	4.73	-4.06	*
Average White:				
worthless-valuable	4.39	3.63	2.03	.047
beautiful-ugly	3.56	4.28	-2.02	.048
dumb-smart	4.37	3.33	2.78	.007
Teachers:				
risky-cautious	4.32	3.00	3.28	.002
worthless-valuable	4.83	3.26	4.05	*
bad-good	4.73	3.65	2.78	.007
beautiful-ugly	2.80	3.79	-3.12	.003
dumb-smart	4.00	2.98	2.45	.017
sad-happy	4.46	3.26	3.13	.002
tense-relaxed	5.20	4.16	2.86	.005
giving-taking	3.41	4.34	-2.42	.018
Myself:				
brave-cowardly	5.80	4.98	3.25	.002
beautiful-ugly	5.20	4.65	1.95	.055
Ideal Self:				
risky-cautious	4.00	2.88	2.71	.008
brave-cowardly	5.61	6.33	-2.38	.020
dependent-independent	3.95	2.58	2.85	.006
dumb-smart	2.24	1.47	2.85	.006
sad-happy	2.25	1.58	2.44	.017
tense-relaxed	2.13	1.56	2.13	.036
giving-taking	5.34	6.02	-2.02	.047
Distance				
IDEAL SELF vs. AVERAGE INDIAN	6.11	7.80	-2.38	.020
MYSELF vs. AVERAGE WHITE	8.59	6.46	2.25	.028
MYSELF vs. TEACHERS	9.30	6.51	2.66	.010
AVERAGE INDIAN vs. AVERAGE WHITE	8.63	5.98	2.31	.024
TEACHERS vs. AVERAGE INDIAN	7.23	5.21	2.65	.010

*p<.001

likely to rate THE AVERAGE TEACHER as more cautious, and as smarter, than their low counterparts. They were more likely to see THE KIND OF PERSON I WOULD LIKE TO BE as being more independent, and happier. Finally, they were more likely to place a greater distance between THE AVERAGE INDIAN and THE KIND OF PERSON I WOULD LIKE TO BE.

Hypothesis Four

The reported perceptions of themselves, ideal self and others of high achieving Indian students will correspond more closely to those of their teachers, than will the perceptions of low achieving Indian students.

In order to discover whether individual item ratings, concept ratings and distances between concepts reflecting perceptions of self, ideal self and others placed teachers and high achieving Indians closer than teachers and low achieving Indians, an average teacher score for each rating was computed. A teacher average was also obtained for each distance score. Teacher averages were then subtracted from each student's individual set of responses. The resultant scores indicated the absolute distance between each individual student's score and the average teacher's score.

T test comparisons and Hotelling's T Squared analyses were performed between low achiever-teacher and high achiever-teacher difference scores. One set of analyses defined Indian student achievement by GPA; another set defined Indi-

an student achievement by SRA. The results are presented below.

Analyses by GPA.

A Hotelling's T Squared analysis of the six concept rating scales in the Self-esteem and Value Differential was performed to determine if there were significant differences between low GPA students' differences from the average teacher and high GPA students' differences from the average teacher. As presented in Table 20, the results of this analysis were significant.

TABLE 20

Combined Concepts: Low GPA/Teach vs. High GPA/Teach

Source	DF	SS	MS	F	P
Model	6	4.57	.76	3.33	.004
Error	142	32.54	.23		
Total	148	37.11			

R = .12

A Hotelling's T Squared analysis between the fourteen distance scores of the Self-esteem and Value Differential, described in the preceeding section, was performed. Again, these distance scores significantly separated the two groups: the results are recorded in Table 21.

Using the 72 individual items of the Self-Esteem and Value Differential, a Hotelling's T Squared analysis failed to find significant differences between the two groups. However, as revealed in Table 22, the Hotelling's T Squared ap-

TABLE 21

Combined Distances: Low GPA/Teach vs. High GPA/Teach

Source	DF	SS	MS	F	P
Model	14	7.22	.52	2.31	.007
Error	134	29.90	.22		
Total	148	37.11			

R = .19

proached significance. Failure to find significant results on this comparison was probably due to the large number of items and comparatively few subjects.

TABLE 22

Combined Items: Low GPA/Teach vs. High GPA/Teach

Source	DF	SS	MS	F	P
Model	72	20.96	.29	1.45	.075
Error	55	11.03	.20		
Total	127	31.99			

R = .66

Even though the Hotelling's T Squared with 72 items failed to achieve significance, when the t tests for the individual items were surveyed, it was discovered that 62 of the 72 items revealed a closer similarity between the ratings of teachers and high achievers than between the ratings of teachers and low achievers. Twenty-one of these individual t tests were significant. These findings, and significant findings from item analysis of concept ratings and distance scores, are recorded in Table 23.

TABLE 23

Individual Ratings: Low GPA/Teach vs. High GPA/Teach

Variable	Lo/Tch	Hi/Tch	T	P
Average Indian:				
beautiful-ugly	1.24	.99	2.01	.046
tense-relaxed	1.50	1.13	2.01	.047
Average White:				
risky-cautious	1.74	1.17	3.40	*
cruel-kind	1.68	1.27	2.16	.032
brave-cowardly	1.54	1.02	3.18	.002
bad-good	1.57	1.16	2.31	.023
dependent-independent	1.70	1.23	2.64	.009
beautiful-ugly	1.42	1.00	2.61	.010
dumb-smart	1.58	1.08	2.91	.004
sad-happy	1.35	1.02	2.19	.030
Teachers:				
risky-cautious	1.86	1.40	2.46	.015
brave-cowardly	1.83	1.38	2.20	.029
dumb-smart	1.91	1.31	2.79	.006
sad-happy	1.72	1.34	1.97	.050
Students:				
cruel-kind	1.49	1.16	2.08	.040
Myself:				
cruel-kind	1.27	.96	2.43	.017
brave-cowardly	1.25	.94	2.53	.012
worthless-valuable	1.47	1.00	2.98	.003
dependent-independent	1.98	1.41	2.71	.008
dumb-smart	1.41	.88	3.95	*
Ideal Self:				
dependent-independent	2.14	1.61	2.01	.047
sad-happy	1.17	.85	2.27	.024
Distance				
AVERAGE WHITE	5.91	4.66	2.80	.006
TEACHERS	7.47	6.30	2.19	.030
MYSELF	5.68	4.81	3.43	.001
IDEAL SELF vs. AVERAGE INDIAN	3.52	2.42	3.09	.003
IDEAL SELF vs. AVERAGE WHITE	3.90	2.64	2.63	*
MYSELF vs. AVERAGE WHITE	3.70	2.41	2.56	.012
IDEAL SELF vs. TEACHERS	4.74	3.42	2.15	.033
MYSELF vs. TEACHERS	4.97	3.16	3.11	.002
AVERAGE INDIAN				

vs.				
AVERAGE WHITE TEACHERS	4.11	2.84	2.37	.019
vs.				
AVERAGE WHITE TEACHERS	3.81	2.54	2.75	.007
vs.				
AVERAGE INDIAN	3.43	2.05	3.46	*

*p<.001

The results of the item analyses indicate that in general, the reported perceptions of high achieving Indian students corresponded more closely to those of their teachers than did the perceptions of low achieving Indian students. All of the six concepts placed teachers closer to the high achievers than to the low achievers; for three concepts, significance was found. All of the fourteen distance scores also revealed a greater similarity between teachers and high achievers than between teachers and low achievers; eight of these comparisons were significant. And, as previously stated, 62 of the 72 individual item ratings revealed a closer correspondence between ratings of teachers and high achievers than between the ratings of teachers and low achievers.

Analyses by SRA.

High and low Indian student groups were also formed on the basis of SRA scores, and t test comparisons on the concept ratings, distance scores and individual items were performed. Table 24 presents the results of the t test comparisons between the high GPA Indian student's differences from

the average teacher and the low GPA Indian's differences from the average teacher.

Once again, the hypothesis that the reported perceptions of high achieving Indians would correspond more closely to those of their teachers than would the perceptions of low achievers was supported. Sixty-seven of the 72 individual items revealed a closer correspondence between teachers and high achievers than between teachers and low achievers; significant levels were discovered for 33 of these items. Five of the six concepts significantly differentiated between the high and low achievers' difference from the average teacher, placing the high achievers closer than the low achievers; once again, the insignificant concept nevertheless revealed a closer relationship between teachers and high achievers than between teachers and low achievers. And for the fourteen distance scores, thirteen scores were in the direction of indicating less difference between teachers and high achievers than between teachers and low achievers; nine of these scores were significant.

TABLE 24

Individual Ratings: Low SRA/Teach vs. High SRA/Teach

Variable	Low	High	T	P
Average Indian:				
brave-cowardly	1.38	1.00	2.24	.028
bad-good	1.42	1.04	2.16	.035
dependent-independent	1.78	1.30	2.04	.044
beautiful-ugly	1.18	.87	1.91	.055
dumb-smart	1.28	.88	2.26	.027
sad-happy	1.49	1.00	2.16	.034
tense-relaxed	1.37	.88	2.27	.026
Average White:				
risky-cautious	1.65	1.22	1.98	.051
cruel-kind	1.81	1.08	2.75	.008
brave-cowardly	1.78	1.02	3.28	.002
worthless-valuable	2.26	1.27	3.80	*
bad-good	1.97	1.05	3.73	*
beautiful-ugly	1.92	.82	4.93	*
dumb-smart	1.99	.94	4.40	*
sad-happy	1.54	.97	2.80	.007
Teachers:				
risky-cautious	2.02	1.22	3.24	.002
cruel-kind	2.77	2.14	1.97	.053
brave-cowardly	2.18	1.43	2.70	.009
worthless-valuable	3.13	1.59	4.63	*
bad-good	2.94	1.80	3.37	.001
beautiful-ugly	2.11	1.26	3.33	.001
dumb-smart	2.14	1.34	2.42	.018
sad-happy	1.99	1.23	2.89	.005
giving-taking	2.37	1.57	2.77	.007
Students:				
cruel-kind	1.70	1.08	3.08	.003
dumb-smart	1.35	.98	2.01	.048
Myself:				
risky-cautious	1.92	1.41	2.23	.028
cruel-kind	1.36	.98	2.58	.012
brave-cowardly	1.40	.82	4.37	*
dependent-independent	1.94	1.44	1.96	.053
Ideal Self:				
brave-cowardly	1.28	.83	2.26	.027
dependent-independent	2.52	1.67	2.29	.024
dumb-smart	1.18	.73	2.24	.028
Concept				
AVERAGE WHITE	5.36	4.39	5.08	*
TEACHERS	7.06	5.90	4.55	*
MYSELF	5.25	4.61	5.32	*
IDEAL SELF	5.60	4.62	6.56	*
Distance				
IDEAL SELF vs. AVERAGE WHITE	4.21	2.38	2.68	.009

MYSELF vs. AVERAGE WHITE	4.81	2.09	3.86	*
IDEAL SELF vs. TEACHERS	5.61	3.33	2.71	.008
MYSELF vs. TEACHERS	6.25	2.92	3.97	*
MYSELF vs. STUDENTS	3.22	1.99	2.55	.013
AVERAGE INDIAN vs. AVERAGE WHITE TEACHERS	5.43	2.82	3.33	.001
AVERAGE WHITE TEACHERS vs. AVERAGE INDIAN STUDENTS	3.41	1.82	2.95	.005
AVERAGE INDIAN STUDENTS vs. AVERAGE INDIAN	4.72	2.78	2.64	.010
	3.34	1.86	2.54	.014

*p<.001

Teachers vs. Indian Students.

The results of the preceeding analyses have supported the hypothesis that reported perceptions of themselves, ideal self and others of high achieving Indian students correspond more closely to those of their teachers than the perceptions of low achieving Indian students. In an attempt to further delineate differences between individual ratings of high and low achievers and their teachers, another set of analyses was performed. The individual ratings of the teachers, as a group, were compared with the ratings of all Indian students. Table 25 presents the results of these comparisons.

TABLE 25

Individual Ratings: Teachers vs. Indian Students

Variable	Low	High	T	P
Average Indian:				
risky-cautious	3.97	4.20	-1.03	.303
cruel-kind	2.88	3.10	-1.28	.204
brave-cowardly	4.68	5.44	-4.97	*
worthless-valuable	2.86	2.81	3.25	.801
bad-good	3.02	3.05	-.16	.875
dependent-independent	4.52	3.69	3.53	*
beautiful-ugly	4.68	5.02	-2.24	.027
dumb-smart	3.59	3.03	2.82	.005
competitive-cooperative	3.68	4.05	-1.97	.052
sad-happy	4.06	2.99	5.72	*
tense-relaxed	3.63	3.18	2.26	.025
giving-taking	4.17	4.70	-2.28	.023
Average White:				
risky-cautious	3.48	3.69	-1.19	.234
cruel-kind	3.11	3.97	-5.40	*
brave-cowardly	4.48	3.69	5.78	*
worthless-valuable	2.70	3.86	-6.12	*
bad-good	3.06	3.85	-4.75	*
dependent-independent	3.26	3.89	-3.16	.002
beautiful-ugly	4.63	3.95	4.50	*
dumb-smart	3.17	3.57	-2.61	.010
competitive-cooperative	4.58	4.02	2.61	.001
sad-happy	3.32	4.50	-1.25	.212
tense-relaxed	4.14	4.03	.63	.530
giving-taking	3.92	3.43	2.65	.009
Teachers:				
risky-cautious	3.10	3.72	-3.44	*
cruel-kind	2.35	4.49	-12.48	*
brave-cowardly	4.82	3.43	7.75	*
worthless-valuable	1.87	3.84	-11.17	*
bad-good	1.98	3.98	-12.30	*
dependent-independent	2.67	3.86	-5.62	*
beautiful-ugly	4.73	3.45	8.31	*
dumb-smart	2.25	3.23	-5.66	*
competitive-cooperative	2.75	3.67	-4.20	*
sad-happy	3.02	3.77	-4.16	*
tense-relaxed	3.71	4.40	-2.74	.006
giving-taking	5.46	3.84	8.94	*
Students:				
risky-cautious	4.14	4.73	-3.07	.003
cruel-kind	3.44	3.91	-2.18	.030
brave-cowardly	4.51	4.56	-.32	.750
worthless-valuable	2.35	3.61	-6.14	*
bad-good	2.63	3.75	-6.35	*
dependent-independent	4.38	3.82	2.67	.008
beautiful-ugly	5.05	4.39	3.73	*
dumb-smart	3.21	3.58	-2.31	.023

competitive-cooperative	4.00	4.11	-.53	.599
sad-happy	3.16	3.34	-1.00	.314
tense-relaxed	3.35	3.70	-2.15	.034
giving-taking	4.05	3.82	1.18	.239
Myself:				
risky-cautious	3.08	3.76	-3.68	*
cruel-kind	2.06	2.69	-4.29	*
brave-cowardly	4.98	5.27	-1.75	.081
worthless-valuable	1.92	2.70	-5.60	*
bad-good	1.89	2.69	-5.61	*
dependent-independent	2.60	3.50	-4.21	*
beautiful-ugly	4.77	4.90	-.74	.457
dumb-smart	2.19	2.84	-4.81	*
competitive-cooperative	3.49	3.64	-.62	.536
sad-happy	2.53	2.61	-.45	.653
tense-relaxed	3.43	2.97	2.06	.041
giving-taking	5.65	4.92	4.50	*
Ideal Self:				
risky-cautious	3.70	3.40	1.36	.176
cruel-kind	1.43	2.17	-4.74	*
brave-cowardly	6.07	6.03	.20	.840
worthless-valuable	1.34	1.88	-4.29	*
bad-good	1.36	2.00	-4.93	*
dependent-independent	1.79	3.11	-5.95	*
beautiful-ugly	5.66	5.89	-1.21	.228
dumb-smart	1.49	1.85	-2.83	.005
competitive-cooperative	3.59	3.57	.08	.936
sad-happy	1.52	1.85	-2.33	.022
tense-relaxed	1.51	1.89	2.76	.007
giving-taking	6.13	5.55	3.00	.004
Distance				
MYSELF vs. IDEAL SELF	4.96	5.98	-2.82	.006
IDEAL SELF vs. AVERAGE INDIAN	8.16	6.66	3.35	*
IDEAL SELF vs. AVERAGE WHITE	7.36	8.74	-3.48	*
MYSELF vs. AVERAGE INDIAN	6.79	5.72	2.58	.010
MYSELF vs. AVERAGE WHITE	5.40	7.17	-4.94	*
IDEAL SELF vs. TEACHERS	5.90	9.15	-7.84	*
IDEAL SELF vs. STUDENTS	7.38	8.93	-1.64	.104
MYSELF vs.				

TEACHERS	4.16	7.73	-9.71	*
MYSELF vs. STUDENTS	5.84	6.31	-1.27	.207
AVERAGE INDIAN vs. AVERAGE WHITE	5.63	7.10	-3.37	.001
TEACHERS vs. STUDENTS	5.57	7.05	-3.92	*
TEACHERS vs. AVERAGE WHITE	5.18	6.31	-3.46	*
TEACHERS vs. AVERAGE INDIAN	6.48	7.85	-3.49	*
STUDENTS vs. AVERAGE WHITE	4.79	6.46	-4.79	*
STUDENTS vs. AVERAGE INDIAN	5.06	6.21	-3.26	.002

*p<.001

The preceeding table may be divided into two sections: comparisons of individual item ratings, and comparisons of distances. Regarding the individual item ratings, all adjective pairs were scored on a 1 to 7 point scale. A score of 4 is at the midpoint, and indicates that neither adjective is considered to be more salient. Any score falling above 4 indicates a higher rating for the adjective listed first; any score falling below 4 indicates a higher rating for the adjective listed last. The distance scores represent absolute differences between various concepts.

Findings recorded in Table 25 are instructive in interpreting the results of Tables 23 and 24 Since high achievers are closer to the teachers than low achievers in the way

that they responded to certain items, Table 25 may be utilized to reveal the direction of their responses.

Taking Indian student groupings determined by GPA, high achievers were more similar to their teachers in rating THE AVERAGE INDIAN as being less relaxed and less beautiful. For THE AVERAGE WHITE PERSON, teachers and high achievers tended to rate this concept as less risky, more kind, more good, more independent, more beautiful, smarter, and happier than did the low achievers. Teachers and high achievers were more similar in rating TEACHERS than teachers and low achievers, indicating that TEACHERS were more cautious, braver, smarter, and happier. Teachers and high achievers were more similar in rating STUDENTS, indicating that STUDENTS were kinder. In rating the concept MYSELF, teachers and high achievers were more similar than teachers and low achievers in that this concept was rated as more kind, less brave, more valuable, more independent, and smarter. Finally, for IDEAL SELF, teachers and high achievers were more similar than teachers and low achievers in rating this concept as being more independent and happier.

In terms of the distances between concepts, teachers and high achievers placed less distance between IDEAL SELF and THE AVERAGE INDIAN, IDEAL SELF and THE AVERAGE WHITE, THE AVERAGE INDIAN and THE AVERAGE WHITE, and MYSELF and THE AVERAGE WHITE. High achievers and teachers were also more similar in placing less distance between TEACHERS and the

following four concepts: THE AVERAGE WHITE, THE AVERAGE INDIAN, IDEAL SELF, and MYSELF. Possible explanations for these findings will be presented in the next chapter.

Hypothesis Five

Measures of participation in traditional Indian activities will positively relate to educational achievement.

In order to test the hypothesis that participation in traditional Indian activities would positively relate to Indian educational achievement, it was necessary to define which activities would be regarded as traditional. Four activities were selected: attendance at pow wows, attendance at give-aways, eating of so-called "traditional foods" (such as fry bread), and knowledge and use of an Indian language. These selected activities were incorporated into the student and teacher questionnaires. Students and teachers were asked to rate themselves, and were given a score, based on their ratings. A score of 1 indicated that the individual did not participate in the activity; a score of 2 was assigned to those individuals who stated they seldom participated. A score of 3 was used for a response indicating some participation, and 4 was used for frequent participation. It should be noted that all scores were based on self-report.

In order to determine if the four variables separated Indians from non-Indians, a Hotelling's T Squared was derived,

using Indian and non-Indian as the two groups. This Hotelling's T Squared analysis compared all Indian subjects with all non-Indian subjects. As revealed in Table 26, the four selected variables successfully distinguished between the two groups.

TABLE 26

Traditional Activities: Indian vs. Non-Indian

Source	DF	SS	MS	F	P
Model	4	80.15	20.04	153.88	.0001
Error	642	83.59	.13		
Total	646	163.74			
R = .70					

A Hotelling's T Squared analysis was also performed on Indian students with high and low GPA, to determine whether or not the four variables distinguished between the two groups. As revealed in Table 27, the four variables significantly distinguished between the two groups.

TABLE 27

Traditional Activities: Low GPA vs. High GPA

Source	DF	SS	MS	F	P
Model	4	2.33	.58	2.40	.05
Error	140	33.88	.24		
Total	144	36.21			
R = .25					

Since the forementioned variables were highly correlated with being Indian, they were used in a linear combination to construct an Indian activities score for each subject. The correlation coefficient for each variable was used as its weight in the linear combination. The use of correlation coefficients in this manner was recommended by Clark (1982a).

Specifically, the correlation of a variable with Indian student status, multiplied by ten and divided by the standard deviation for the variable, produced that variable's weight in the linear combination, as follows:

1. Pow Wow Attendance = (.61 x 10)/1.08 = 44.44
2. Give Away Attendance = (.41 x 10)/.98 = 41.84
3. Eating of Traditional Foods = (.63 x 10)/.82 = 76.83
4. Use of Indian Language = (.46 x 10)/.72 = 63.88

Traditional activities score = (44.44 x Pow Wow) + (41.84 x Give Away) + (76.83 x Traditional Foods) + (63.88 x Indian Language)

A traditional activities score was computed for each subject. To test the hypothesis that the traditional activities score would relate to Indian student achievement, the student's t was used to compare high and low GPA Indians' mean traditional activities scores. Those students with low GPAs had a mean traditional activities score of 456.15; those with high GPAs had a mean traditional activities score of 432.98. The resultant T of 1.14 was not significant (p=.257).

Using the groupings by SRA, comparisons were made on the traditional Indian activities variables, to check the results attained through GPA groupings. As revealed in Table 28, none of the variables significantly differentiated between high and low SRA achievers.

TABLE 28

Individual Traditional Activities: Low vs. High SRA

Variable	Lo SRA	Hi SRA	T	P
Pow Wows	2.38	2.20	.66	.509
Give Aways	1.98	1.74	1.10	.276
Trad Foods	3.27	3.07	1.06	.294
Indian Lang	1.76	1.72	.22	.827

Finally, the traditional activities scores were correlated with Indian student GPAs. In addition, traditional activities scores were correlated with Indian student attendance percentages. There was an insignificant correlation between the traditional activities score and GPA for Indian students ($r = -.09$, $p<.05$). However, both GPA and the traditional activities score were significantly correlated with Indian student high school attendance (GPA and attendance: $r = .33$, $p<.001$; traditional activities score and attendance: $r = -.19$, $p<.05$). In other words, those Indian students who attended school more often tended to have higher GPAs, and to score lower on participation in traditional Indian activities.

Using high and low Indian student attendance groups, a comparison was made between the mean traditional activities score of each group. The results were significant: low school attenders had a mean traditional activities score of 477.88; high attenders had a mean traditional activities score of 426.08 (T=2.65, p=.009). Table 29 presents the Hotelling's T Squared analysis for high and low attendance on the four factors.

TABLE 29

Combined Traditional Activities: Indians by Attend

Source	DF	SS	MS	F	P
Model	4	2.80	.70	2.96	.022
Error	122	28.85	.24		
Total	126	31.65			

R = .30

In conclusion, the hypothesis that participation in traditional Indian activities would positively relate to Indian educational achievement was not supported. Neither GPA nor SRA was significantly related to traditional activities scores. However, more participation in traditional activities was negatively related to school attendance. Furthermore, those students who attended school more frequently tended to have higher GPAs.

Hypothesis Six

High achieving Indian students will rate THE AVERAGE INDIAN more favorably than low achieving Indian students.

To test the hypothesis that high achieving Indian students rated THE AVERAGE INDIAN more favorably than low achieving Indian students, it was necessary to determine what key would be used to indicate positive attitudes towards THE AVERAGE INDIAN. In order to avoid the confounding influence of individual value preferences, ratings of each student's KIND OF PERSON I WOULD LIKE TO BE were chosen as individual scoring keys. Distance scores between THE AVERAGE INDIAN and THE KIND OF PERSON I WOULD LIKE TO BE were obtained for each Indian student. High and low achieving Indians were then determined using GPA, and the distance scores were compared, using the student's t test.

For the results of the t test, the reader is referred back to Table 18. As can be seen, the hypothesis was not supported. The high achievers placed a significantly greater distance between THE AVERAGE INDIAN and THE KIND OF PERSON I WOULD LIKE TO BE.

To check the results, high and low achieving Indians were also defined using SRA. The mean distance scores between THE AVERAGE INDIAN and THE KIND OF PERSON I WOULD LIKE TO BE, using SRA, also yielded a significant t test comparison (see Table 19). High SRA achievers placed a greater distance between the two concepts.

Self-Esteem Measures and Academic Achievement

In addition to the specific hypotheses that were analyzed, GPA, SRA and attendance percentages were related to measures of self-esteem. There were three measures of self-esteem: the Self-Ideal Discrepancy, the Rosenberg, and the Sliding Person Scale.

Table 30 presents the correlations between all of these variables for Indian students. Table 31 presents the same information for non-Indian students.

TABLE 30

Self-Esteem Correlations: Indian Students

	Sliding Person (SPS)	Rosenberg (Ros)	Self-Ideal (S-I)	SRA	Attendance (Att)
GPA	-.056	.224*	.084	.580**	.373**
SPS		-.279**	.031	.024	-.098
Ros			-.160**	.099	.104
S-I				.009	.004
SRA					.122

*p<.01
**p<.0001

As can be seen from the tables, neither the non-Indian nor the Indian data reveal a significant set of correlations between all measures of self-esteem and all measures of academic achievement. For the non-Indian students, GPA is significantly correlated with SRA and attendance. The three measures of self-esteem are also significantly correlated with each other. But for the Indian students, although GPA

TABLE 31

Self-Esteem Correlations: Non-Indian Students

	Sliding Person (SPS)	Rosen-berg (Ros)	Self-Ideal (S-I)	SRA	Attend-ance (Att)
GPA	.118	.064	.020	.640*	.280*
SPS		-.395**	.224*	.052	.072
Ros			-.312**	.204*	.098
S-I				.004	.017
SRA					-.014

*p<.01
**p<.0001

correlates significantly with SRA and with attendance, it also correlates with the Rosenberg. Moreover, the three self-esteem measures do not all correlate significantly with each other.

their highest loadings on a single factor for non-Indian students, but not for Indian students in this sample. To test this hypothesis, the Clark (1982b) method of factor analysis was utilized. This method locates those factors among a set of variables which are most predictive of a dependent variable.

Two sets of factor analyses were performed: one set using GPA as the dependent variable, and one set using SRA as the dependent variable.

Using a three-factor solution, factors were derived for non-Indian students, and for Indian students. Table 32 presents the non-Indian student three-factor solution, predicting GPA from the other variables. Table 33 presents the same information for the Indian students.

TABLE 32

Rotated Factors Predicting GPA: Non-Indian Students

	I	II	III
Attendance	.014	.014	-.982
SRA	.977	-.042	-.007
Rosenberg	.122	-.784	-.047
Sliding Person	.166	.784	.112
Correlation with GPA	.65	-.19	-.12

TABLE 33

Rotated Factors Predicting GPA: Indian Students

	I	II	III
Attendance	.307	-.268	-.572
SRA	.947	.011	-.036
Rosenberg	.186	-.767	.105
Self-Ideal	-.116	.184	-.849
Sliding Person	.162	.810	.110
Correlation with GPA	.61	-.19	-.12

For the non-Indian students, all of the self-esteem measures have the highest loadings on one factor, Factor 2. However, for the Indian students, the three self-esteem measures do not all attain their highest loadings on the same factor. The Rosenberg and the Sliding Person Scale both load highest on Factor 2; however, Self-Ideal Discrepancy loads highest on Factor 3. Therefore, the three self-esteem measures have their highest loadings on a single predictive factor (predicting GPA) for non-Indian students who were sampled, but not for Indian students.

Predicting SRA from the remaining variables, the three self-esteem measures also load on a single factor for non-Indian students. Again, the Indian student data does not reveal the same pattern. Table 34 presents the non-Indian student three-factor solution, predicting SRA from the other variables. Table 35 presents the same information for Indian students.

TABLE 34

Rotated Factors Predicting SRA: Non-Indian Students

	I	II	III
Attendance	.139	-.006	.987
GPA	.959	.042	.142
Rosenberg	.228	-.802	.071
Self-Ideal	.056	.659	-.036
Sliding Person	.167	.741	.106
Correlation with SRA	.69	-.07	-.11

TABLE 35

Rotated Factors Predicting SRA: Indian Students

	I	II	III
Attendance	.253	.515	.397
GPA	.990	.114	.066
Rosenberg	.179	.648	-.399
Self-Ideal	.057	-.084	.858
Sliding Person	.003	-.772	.017
Correlation with SRA	.59	-.03	-.03

Summarizing, in the present study, the significant correlations among self-esteem, achievement and attendance meas-

ures were different for Indian and non-Indian students. Both groups showed significant positive intercorrelations between attendance, SRA, and GPA. However, the three self-esteem measures were positively intercorrelated for ncn-Indian students, but not for Indian students. Further analysis indicated that the three self-esteem measures loaded on the same factor in the prediction of achievement for non-Indian students, but did not load on the same factor for Indian students.

The next chapter will discuss possible explanations for these findings and the findings related to the study hypotheses.

Discussion

This study was designed to explore Indian values as they relate to educational achievement. In discussing the results of this study, a number of questions may be examined. The first question pertains to Indian student academic achievement: do the findings support notions of Indian educational underachievement? The second question concerns the values of Indian students and their teachers: are these values qualitatively and quantifiably different, and how might they relate to the educational process? A third question is directed towards achievement within the Indian student population: how are the reported perceptions and values of high achieving Indians different from those of low achieving Indians? Each of these questions will be addressed in this chapter.

Academic, Demographic and Social Variables

In comparing the academic, demographic and social variables for the Indian and non-Indian students attending the sample schools, some significant differences emerged. Some of the findings provide support for notions of Indian educational underachievement, and some of the findings appear to reflect differences in cultural lifestyles and values.

The Indian students in this sample achieved significantly lower scores on a standardized achievement test, the SRA. They also had significantly lower GPAs, and significantly lower attendance figures. Although the Indian students were not significantly different from the non-Indian students in age, they were overrepresented in the lower grades. And with advancing age, the Indian students were likely to receive lower grades from their teachers, and to attend school less often. These findings support previous reports of Cahn (1969), Edington (1969), Heath (1971) and others that Indians do more poorly in school.

Another school-related finding was that Indian students were less likely to participate in extracurricular school activities. Grabe (1975) has hypothesized that students who do not participate in school activities are likely either to have low self-concepts or to be alienated from the school's influence. The results of the present study do not indicate that the self-concept of the typical Indian student is significantly lower than that of the average non-Indian student. Therefore, the fact that Indian students participate in fewer extracurricular activities may denote a general feeling of alienation which Indian students experience within the school setting. This feeling of alienation could give rise to an Indian subculture within the school, which does not value extracurricular activities in the same manner as the majority school culture.

Other findings might reflect a difference in cultural lifestyles. Relative to non-Indian students, Indian students tended to report more siblings, on the average, and more total household members. These findings may reflect an emphasis on the family, including the "extended family", noted by authors such as Ablon (1964) and Misiaszek (1969) as being characteristic of Indian people. However, since larger families also tend to be found at lower socioeconomic levels (Social Work Editorial Committee 1971), it is uncertain to what extent these findings are reflective of Indian values rather than socioeconomic variables.

To summarize, comparisons between Indian and non-Indian student groups support notions of Indian educational underachievement. In addition, the Indian students sampled tended to be less involved in school activities. They reported more siblings, and more household members. It has been suggested that some of the forestated differences may be due to differences in cultural lifestyles and values.

In the present study, other responses of high and low achieving Indians were also compared. It was discovered that high achievers were more likely to indicate an interest in attending college upon completion of high school. They were also more likely to indicate the importance of completing high school.

One interesting finding which emerged was that the more schools which an Indian student had attended, the higher the

GPA, SRA, and school attendance percentage. A survey of the literature uncovered only one study regarding number of schools attended by Indian students: that of Metcalf (1976), who studied Navajo women. Metcalf used total schools as a measure of cultural disruption, hypothesizing that the more schools an Indian student attended, the more likely he or she would receive exposure to the majority culture. If this hypothesis is held, then increased exposure to the majority culture positively relates to Indian achievement.

The next section will explore more differences between high and low achieving Indians, through character trait preferences.

Character Trait Preferences

It was hypothesized that high and low achieving Indians would be significantly different in rating character traits. It was also hypothesized that the high achievers' ratings would be more like their teachers' ratings than would the ratings of the low achievers. Both of these hypotheses were supported.

Comparing the scales of high achieving Indians, low achieving Indians and teachers, it was discovered that all groups gave their most favorable ratings to the trait, "honest", followed by the trait, "dependable." The character trait "understanding" also tended to receive strong and favorable ratings from all three groups. The character traits

"popular", "attractive", and "important" received negative ratings from all three groups. The trait "cheerful" also tended to receive less favorable ratings from all groups.

However, the ratings of certain adjectives distinguished between the three scales. In particular, the ratings of the school-related adjectives "logical" and "intelligent", the adjective "athletic", and the adjective "independent" revealed differences between the three groups. These differences may reflect some group value preferences.

All three groups rated the adjective "intelligent" positively. However, the ratings of the high achievers were much more positive than those of the low achievers. Thus, Indian low achievers did not indicate that they valued intelligence to as great a degree as the high achievers or the teachers. Low achievers seemingly preferred to endorse other characteristics, which they rated more favorably.

Two school-related characteristics were chosen for inclusion in the Character Valuation Test: "intelligent" and "logical". It may be noted that high achievers and teachers also gave higher ratings to "logical" than did low achievers.

As previously stated, the traits "intelligent" and "logical" were both chosen as school-related traits. Based on the premise that subjects perceived being "smart" and "logical" as being related to success in school, some tentative explanations may be extended for the differences between

high and low achieving Indians. The fact that the low achievers reported that they did not value these school-related traits as much as the high achievers may be related to their own underachievement. Whether their value preference is a cause or an effect of low achievement is uncertain. In other words, students may not value being intelligent or logical because they do poorly in school, or they may do poorly in school because they do not value these characteristics as highly as other characteristics. It is also possible that the low achievers actually value these traits as strongly as the high achievers, but deny their true feelings on a self-report instrument because they are doing poorly in school.

If low achievers do not claim to value academic traits as strongly as high achievers, do they prize other traits more strongly? By looking at the scales, ratings of the trait "athletic" may be informative. Low achievers rated this trait in a positive fashion; both teachers and high achievers rated this trait in a negative fashion. It appears that these low achievers may find meaning for themselves through indicating a positive valuation of athletics to a greater degree than teachers or high achievers.

Different ratings were also obtained for the character trait, "independent." In contrast to their teachers, both student groups tended to reject this character trait in preference for other character traits. This finding may be

partially related to the fact that the students are adolescents. As such, they are not apt to be as economically independent or as self-reliant. Furthermore, the fact that the students were Indian might also have affected their rankings of this adjective.

Although it was originally formulated that independence may reflect an Indian value preference, most Indian people are not economically independent. For a multitude of reasons, many Indians rely on welfare and other social support systems. Ahler (1974) discovered that the Indian students in her study tended to rate the concept, WELFARE, more positively than non-Indian students. Perhaps the rating of "independent" in the present study is related to Ahler's findings: for these Indian students, the majority culture emphasis on self-sufficiency may not be as highly regarded.

The concept of independence may entail more than economic independence. It may also have to do with self-reliance as opposed to reliance on family and friends. Perhaps one reason why the Indian students do not indicate that they value this trait as highly as their teachers may be due to a differential view of themselves in relationship to others. It has been stated that Indian people are likely to have a strong group orientation, and to value helping others within their group (Brophy & Aberle 1966; Bryde 1971; Hynd & Garcia 1979; Pepper 1976; Wax, Wax & Dumont 1964). Indian students in this study may not have valued independence because they

do not see themselves as being self-reliant, but see themselves as part of a community. This notion, and other notions relating to Indian student self-concept, will be further explored later in this chapter.

The next section will review further comparisons between high achievers, low achievers and teachers. Reported perceptions of themselves, ideal self and others will be explored. In addition, comparisons between the Indian students, the non-Indian students and the teachers will be presented and reviewed, in an attempt to provide a broader framework for the present study.

Ratings of Self, Ideal Self and Others

In the second chapter of this paper, it was stated that IDEAL SELF (i.e., THE KIND OF PERSON I WOULD LIKE TO BE) would be used as each subject's key, to determine the value placed on themselves and others. The notion that one's values might influence what characteristics are seen as ideal was presented as a reason against using a standardized key. In order to determine if there were value differences which influenced ratings of IDEAL SELF, the ratings of the teachers and Indian students were examined. By their ratings, both teachers and Indian students indicated that the IDEAL SELF would be cautious, kind, brave, valuable, good, independent, beautiful, smart, cooperative, happy, relaxed, and giving. However, there were differences in terms of de-

grees. The teachers rated the IDEAL SELF as significantly kinder, more valuable, more good, more independent, smarter, happier, more relaxed, and more giving than did the Indian students as a group.

In the construction of the Self-Esteem and Value Differential, some traits were chosen as being more representative of Indian values than of non-Indian values. These traits were: brave, independent, relaxed, giving, cooperative, and cautious. It was expected that the teachers and the Indian students would rate THE AVERAGE INDIAN and THE AVERAGE WHITE PERSON differently on these traits, to the extent that they perceived these traits as being more representative of Indian than of non-Indian values. On the whole, however, these traits were viewed positively by all study participants. Ratings of THE AVERAGE INDIAN and THE AVERAGE WHITE did not reveal a tendency for THE AVERAGE INDIAN to be rated more strongly on these traits. In fact, as previously noted, the teachers actually rated the IDEAL SELF as being more relaxed, more giving and more independent than did the Indian students. The IDEAL SELF ratings on cooperation and bravery did not distinguish between the teachers and the Indian students, nor did the Indian students and teachers differ significantly in rating how cautious the IDEAL SELF would be.

As previously stated, the teachers indicated that the IDEAL SELF would be more independent than did the non-Indian students. Again, the Indian students do not appear to value

"independence" as strongly as the teachers. Possible explanations for this differential rating of the IDEAL SELF will be presented later in this paper.

Looking at other individual concepts, some interesting findings emerged. Indian students depicted THE AVERAGE INDIAN as being more giving, more relaxed, smarter, braver, and more independent than did the teachers. The teachers indicated that THE AVERAGE INDIAN was unhappy; the Indian students reported that THE AVERAGE INDIAN was happy. The teachers also depicted THE AVERAGE INDIAN as dependent, whereas the Indian students depicted THE AVERAGE INDIAN as independent. Other than that, the ratings of the teachers and the Indian students were in the same direction.

Looking at the ratings of THE AVERAGE WHITE, the responses of the Indian students revealed some negative evaluations. The Indian students rated THE AVERAGE WHITE as being ugly, taking, and cowardly. They also did not indicate that THE AVERAGE WHITE was as smart, as valuable, as good, or as independent as did the teachers.

In looking at ratings of TEACHERS, it was discovered that the teachers gave their own group more positive ratings than did the Indian students. Indian students rated TEACHERS as cruel, cowardly, and ugly. The Indian students also indicated that TEACHERS were less smart, less independent, less happy, less valuable and less good than did the the teachers. The Indian students claimed that TEACHERS were taking, whereas the teachers reported that TEACHERS were giving.

High school students are likely to feel some alienation from their teachers, since the students are adolescents. Thus, it is not surprising that the Indian students tended to report unfavorable perceptions of their teachers. These reported perceptions may actually reflect true feelings. Students may also report unfavorable perceptions because they feel it is expected of them, and/or because these perceptions are acceptable to other members of their peer group. The fact that Indian students rated their teachers negatively may also be partially due to the difference in teacher race, as the majority of teachers were white. Negative ratings from the Indian students may also have been common because the Indian students generally performed poorly in school. Since Indian students tended to receive low grades, they may not have felt favorably towards their teachers.

Looking at the ratings of STUDENTS, the responses of the teachers were generally more positive than were the responses of the Indian students. Teachers and Indian students rated STUDENTS as risky (a negative evaluation for both groups), but the teachers rated STUDENTS as being less risky. The teachers rated STUDENTS as kinder, more valuable, more good, and more beautiful than did the Indian students. There was only one comparison whereby the teachers rated STUDENTS in more negative terms: that of dependent-independent. The teachers indicated that they perceived

STUDENTS as dependent, whereas the Indian students reported that STUDENTS were independent. Perhaps, for the teachers, the fact that students are adolescents influenced their ratings on this comparison. From an adult perspective, adolescents may be perceived as more dependent due to their age and different societal position.

Overall, the teachers appeared to minimize differences between themselves and others. Specifically, the Indian students placed a greater distance between THE AVERAGE INDIAN and THE AVERAGE WHITE PERSON than did their teachers. They also placed a greater distance between TEACHERS and STUDENTS. One possible explanation for this finding would be that the teachers were unwilling to recognize legitimate differences. Authors such as Cahn (1969), Heath (1971) and Holtzman (1971) have noted that teachers may be apt to ignore cultural and social differences, preferring an approach which they feel is more democratic. The teachers may also have been more cautious in their responses, attempting to avoid stereotyping or overgeneralizing. However, it is also possible that there may have been a tendency for the Indian students to respond in extreme directions, rating concepts either as "all good" or "all bad." It has been previously noted that the Indian students tended to report that THE AVERAGE WHITE PERSON had many negative characteristics. They were also likely to characterize teachers in negative terms. The tendency for adolescents to view themselves and

others in more extreme fashion than adults has been noted by authors such as Erickson (1968).

Some of the hypotheses for the present study concerned reported perceptions of self, ideal self and others. It was predicted that the reported perceptions of high and low achieving Indian students would be different from each other. Furthermore, it was predicted that the perceptions of the high achievers would be more similar to those of their teachers than would the perceptions of the low achievers. The results of the study supported both of these hypotheses.

Low achievers tended to indicate that THE AVERAGE TEACHER was less smart and less cooperative than did the high achievers. They also rated the concept MYSELF as being less smart than did the high achievers. Again, the fact that the low achievers were not doing as well in school may account for some of these differences.

Low achievers and teachers tended to be more dissimilar in their reported perceptions than were high achievers and teachers. All of the significant differences which were obtained placed the teachers closer to the high achievers than to the low achievers. If the previously described differences between teachers and Indian students are recalled, the meaning of the closer similarity between teachers and high achievers can be more fully understood.

Since the high achieving Indians were closer to the teachers than were the low achieving Indians, the differenc-

es which were previously discussed between Indians and teachers may also distinguish high and low achievers. High achievers tended to be less critical of THE AVERAGE WHITE and TEACHERS than were low achievers. In this respect, their responses were more similar to those of their teachers.

Another finding from this set of analyses involved ratings on the concept IDEAL SELF. Low achievers did not rate the IDEAL SELF as being as independent or as happy as either high achievers or teachers. These different perceptions of the IDEAL SELF may indicate that the values of the high achievers are closer to those of their teachers, since ratings of IDEAL SELF represent values concerning ideal characteristics (Bills, Vance & McLean 1951).

Once again, a preference for independence may have to do with self-reliance, as opposed to reliance on other members of a community or culture. And a preference for happiness suggests an orientation towards personal satisfaction in contrast to the well-being of a larger group. Many authors have noted that traditional Indian values may result in behavior which is more oriented towards helping others within their own group, rather than achieving individual goals (e.g., Hynd & Garcia 1979; Wax, Wax & Dumont 1964). It may be conjectured that by their responses, low achievers are ascribing to more traditional values.

In support of this conjecture, a study by Sullivan (1979) may be cited. Using the Piers-Harris Children's Self-Concept Scale, Sullivan discovered that those Indian students who emerged from a more traditional community did not indicate that the IDEAL SELF would be as happy as did those Indian students from a more modern community.

High achievers were more similar to their teachers in placing less distance between various concepts than did the low achievers. Of particular interest are the distances placed between THE AVERAGE INDIAN and THE AVERAGE WHITE PERSON, and between MYSELF and THE AVERAGE WHITE PERSON. The fact that the high achievers were more similar to the teachers than the low achievers in placing less distance between these concepts may indicate that they feel less alienated from the non-Indian world.

Again, high achievers were more similar to their teachers than low achievers in placing less distance between TEACHERS and MYSELF, and between TEACHERS and IDEAL SELF. Like their teachers, the high achievers may be apt to feel more positively towards TEACHERS than do the low achievers.

To summarize, in the present study, the reported perceptions of high and low achieving Indians were significantly different from each other. In addition, the reported perceptions of the teachers tended to be more closely aligned with those of the high achievers. These results are similar to those obtained with character trait preferences, where

teachers and high achieving Indians were also found to be more similar than teachers and low achievers.

Character trait rankings and perceptions of self, ideal self and others may reflect preferred value orientations. Participation in traditional Indian activities may also reflect preferred value orientations. The next section will present the results of the hypothesis relating participation in traditional activities to Indian academic achievement.

Traditional Indian Activities and Achievement

In the present study, it was predicted that participation in traditional activities would positively relate to Indian student academic achievement. The results of the study did not support this hypothesis. Neither Indian high nor low achievers were more apt to participate in traditional activities. However, participation was significantly related to high school attendance. Those Indian students who reported greater participation in traditional activities also had poorer attendance figures.

The fact that Indians who participate in traditional activities have lower attendance figures, but do not differ from other Indian students in terms of GPA or SRA scores, indicates that these students are not simply less intelligent. Why, then, do they attend school less often? One possible explanation might be that the criticisms of authors such as Chadwick, Bahr and Strauss (1977), Davis and Pyat-

skowit (1976), Dozier (1971), McDonald (1973), and Misiaszek (1969) are accurate. These authors believe that poor Indian student attendance results from the fact that traditional Indian activities and values are not recognized within the schools. Thus, Indian students may fail to attend school and/or drop out of school. These authors would support the notion that if traditional Indian activities and values were brought into the schools, the students would feel less alientated from the school and would attend school more frequently.

The finding that high achievement at the high school level does not correlate with participation in traditional Indian activities is in direct opposition to Jeanotte's (1981) finding with Indian college students. Jeanotte used similar measures of traditional activities, including participation at pow wows, eating of traditional foods, and knowledge and use of an Indian language. Jeanotte reported that those Indians who were more likely to remain in college were more likely to participate in traditional activities. They also had significantly higher ACT scores and high school grades than those who dropped out.

But at the college level, many Indians may be especially in need of the sense of community which pow wows and other traditional Indian activities impart. Not only may being away from their home communities be stressful, but they may also have more exposure to discrimination and prejudice from

the majority culture, which Lynch (1981) and others have noted are abundant. Thus, some Indian students may "rediscover" their heritage at the college level; others who have participated at the high school level may simply continue their participation. Increased exposure to Indian issues through specialized college coursework may also foster a new-found pride and committment towards their culture for some Indian students (Murray 1983). And Indian students who are more traditional may simply have a better attitude towards being Indian and a positive outlook towards themselves, which would result in an easier adaptation to any novel situation (Schneider 1983). The Indian college student who does not participate may feel cut off from both Indian and non-Indian communities, and thus be more likely to drop out.

In general, the Indian high school students in this study were more likely to participate in activities which may be regarded as "Indian" than were the non-Indian students. These activities included attending pow wows and give-aways, eating "traditional food", and using an Indian language. In one sense, this is hardly an unexpected finding. An analogous example would be the expectation that self-identified Norwegians would report more lefse consumption. Although to this author's knowledge a study to test this hypothesis has not been conducted, the results appear to be predictable.

Nevertheless, the fact that Indian students report more traditional activities than non-Indian students may be noteworthy. Also noteworthy is the fact that achievement does not correlate with Indian student traditional activity participation. Indian students do not appear to be actively "throwing off" differences between their culture and the wider majority culture. Rather, Indian students appear to be defining themselves as "Indian" through their activities, in the same way that Norwegians might define themselves through specialized activities related to their heritage. Although there may be other variables involved, those people who undertake the activities of a particular heritage generally appear to hold that heritage in esteem. Thus, Indian students may value their heritage, since they participate in activities of that heritage to a significantly greater degree than non-Indians.

The next section will further explore Indian values through self-esteem measurement results. In addition, the valence which Indian students placed on the concept THE AVERAGE INDIAN will be discussed.

Indian Self-esteem and Achievement

The final set of analyses involved correlations between three self-esteem measures, two achievement measures and attendance percentages. For both Indian and non-Indian students, the two achievement measures were significantly cor-

related with each other. In other words, those students who received higher grades were apt to do better on the SRA achievement series. This finding indicated that grades given by the North Dakota teachers in this sample were a reflection of the students' abilities as measured by a standardized achievement test. Thus, the criticism by Malpass (1953) that grades may not be an accurate reflection of students' abilities may not apply to the grades given by North Dakota teachers in the present study.

For both Indian and non-Indian students, GPA was also significantly related to attendance. However, the correlations between GPA and attendance were not as strong as those between GPA and SRA. Moreover, SRA did not correlate significantly with attendance for Indian or non-Indian students. Thus, how often a student attended school may have influenced teacher grades, although it did not appear to influence performance on the SRA.

Only one measure of self-esteem, the Rosenberg, was significantly related to achievement. For Indian students, the Rosenberg significantly correlated with GPA; for non-Indian students, the Rosenberg significantly correlated with SRA.

The finding that the Rosenberg related positively to Indian student GPA, whereas the Self-Ideal Discrepancy and the Sliding Person Scale did not, provides a possible explanation for the discrepant findings among researchers noted in the second chapter. The area of Indian student self-esteem

has been hotly contested. Some researchers have claimed a relationship between low Indian self-esteem and failure in school (e.g., Bryde 1966), whereas others have denied such a relationship (e.g., Fuchs & Havighurst 1973). The results of the present study suggest that research findings reported in the literature may have strongly depended upon which test instrument was used. If only the Self-Ideal Discrepancy had been used in the present study, the conclusion might have been that there was no correlation between academic achievement and self-esteem. If only the Rosenberg had been used, there might have been a different conclusion.

For non-Indian students, the Rosenberg, Self-Ideal Discrepancy and Sliding Person Scale scores were all significantly correlated with each other. They all appear to be measuring a similar trait, which has been termed "self-esteem." When subjected to a variant of factor analysis which predicted GPA or SRA, the measures all loaded on the same factor.

But for non-Indian students, the three so-called self-esteem measures were not all significantly intercorrelated. Although the Rosenberg significantly correlated with Self-Ideal Discrepancy and with Sliding Person Scale scores, the latter two measures did not significantly correlate with each other. Furthermore, in the prediction of GPA or SRA, the three measures did not load on the same factor. Thus, it appears that the three measures did not operate in the

same fashion for the Indian students as for the non-Indian students.

Summarizing, in the present study, there appears to be a non-Indian "self-esteem factor" measured by three tests. However, there is not a corresponding Indian "self-esteem factor." There are many possible explanations for this finding. Some explanations might focus on possible Indian student inconsistency in responding, low motivation to respond accurately, and/or misunderstandings due to educational underachievement leading to improper responding.

However, the finding that the three measures operated differently for Indian students may provide support for the notions of authors such as Baldwin (1979) and Dreyer (1970). These authors warned against using the framework or one culture to interpret the experiences of another. It may be that the concept of self-esteem applies to members of a non-Indian community, but does not apply to members of an Indian community. Dreyer (1970) ascribed to this notion, stating that self-concept and self-esteem are not applicable to Indians because their cultures do not emphasize the self. He believed that in the Indian community, self definitions are blurred because self-identity is not distinct from community identity.

In support of the notion that self-identity may be different for Indian and non-Indian students, it may be recalled that the Indian students were different from the

non-Indian students and teachers in rating how cautious, kind, brave, valuable, good, independent, beautiful, smart, cooperative, happy, relaxed, and giving the IDEAL SELF should be. The Indian students placed significantly less emphasis on these traits than did the non-Indian students or the teachers. Perhaps the concept of the IDEAL SELF is not as relevant for Indian students as for members of the majority culture. Returning to the notions of Dreyer (1970) and others, the phenomenal self may be different for the Indian than for the non-Indian, and may have more to do with an extended self which is part of a community. In other words, Indians may possess less of an individual self identity than do persons from a Western culture. Taking this hypothesis, the IDEAL SELF would be defined as an average community member.

When each individual's IDEAL SELF scores were used as a key against which the SELF scores were compared, the distances between the SELF and the IDEAL SELF were not significantly different for Indian and non-Indian students. If these distances are taken as a measure of reported self-esteem, Indian and non-Indian students do not differ.

Distances between THE AVERAGE INDIAN and THE KIND OF PERSON I WOULD LIKE TO BE were smaller for Indian students than for non-Indian students, or for teachers. In other words, Indian students placed THE AVERAGE INDIAN closer to their ideal, thus holding THE AVERAGE INDIAN in higher es-

teem. These findings are similar to those reported by Ahler (1974) and Helper and Garfield (1965), who found that Indian students rated their race more positively than non-Indian students. These authors suggested that the positive valence which Indian students placed on their race may be a product of present social conditions, including perceived discrimination.

One of the hypotheses for the present study was that low achieving Indians would report a greater distance between THE AVERAGE INDIAN and IDEAL SELF than would high achieving Indians, thus holding THE AVERAGE INDIAN in less esteem. This hypothesis was not supported. Instead, the converse was found: high achieving Indians placed a greater distance between THE AVERAGE INDIAN and IDEAL SELF than did low achieving Indians. This finding should not be interpreted as suggesting that high achieving Indians are rejecting Indian values or Indianness. In fact, high achievers rated THE AVERAGE INDIAN as being closer to IDEAL SELF than either THE AVERAGE WHITE or STUDENTS. However, the finding may suggest that other reference groups are more important for the high achieving Indian than for the low achieving Indian. The low achieving Indian may define himself or herself more in terms of membership within the Indian community, which is seen as alienated from the non-Indian world. High achievers, on the other hand, may see themselves as being somewhat less alienated from the non-Indian world. As Yinger (1961,

p. 154) stated in his article dealing with the effects of discrimination and prejudice, "other reference groups gain in importance when the overwhelming needs for protection and fulfillment rest less heavily on the ethnic community."

Summarizing, the results of the present study indicate that self-esteem may operate differently for Indian and non-Indian students. It has been suggested that Indian students may have a different view of themselves in relationship to others. For Indian students, the phenomenal self may have more to do with an extended self which is part of community than with a separately identified self. The results of the study further suggest that the phenomenal self of low achieving Indians may be more traditional than the phenomenal self of high achieving Indians. Furthermore, the high achievers appeared to be less alienated from the majority culture.

Concurrently, high achievers did not appear to be rejecting Indian values or Indianness. Although the low achievers placed less distance between THE AVERAGE INDIAN and IDEAL SELF than did the high achievers, the high achievers nevertheless held THE AVERAGE INDIAN in high esteem relative to their reported perceptions of other groups.

Conclusions

In the present study, support was obtained for notions of Indian educational underachievement. Furthermore, Indian students could be differentiated from their teachers by their reported perceptions of themselves, ideal self and others. In addition, the concept of self appeared to operate differently for Indian students than for non-Indian students.

Using academic achievement groupings, it was discovered that high achieving Indian students were more similar to their teachers than were low achieving Indian students in indicating preferred characteristics and in reporting perceptions of themselves, ideal self and others. It was suggested that the closer similarity between high achievers and their teachers than between low achievers and their teachers may not be peculiar to Indian students.

It was discovered that neither high nor low achieving Indians showed more participation in traditional Indian activities. However, high achievers expressed more positive attitudes towards non-Indian culture, including their teachers and the educational process.

These findings appear to support the benefits of acculturation in the educational process. As previously stated, through acculturation, an individual uniquely combines his or her heritage with new ideas and methods from an outside culture.

A number of authors have expressed innovative ideas regarding American Indian education. They suggest that schools which make adaptations will produce more successful students. The next chapter will examine these suggestions.

New Directions in Indian Education

Potential innovations relating to Indian education may be divided into five major areas: those relating to student health, curriculum, teachers, teaching methods, and parents and community. Each of these areas will be addressed in this chapter.

Student Health

According to the Bank Street College of Education report (1976, p. 37), "the health status of Indians lags 20 to 25 years behind that of the general population of the United States." These authors suggested that adverse social, economic, and environmental conditions of modern-day Indian life are connected with the disproportionate amount of health problems in Indian communities.

Among school children, ear and eye diseases may greatly interfere with the ability to learn and to communicate. The greatest threat may be otitis media, a middle ear disease which has been the leading reported disease among Indian children (Bank Street College of Education 1976). This disease is most apt to appear when children are around two years old, with chronic reoccurances thereafter. Behavioral, psychological and social consequences may negatively im-

pact on the learning process. For example, the learning rate of students with this condition may be deccelerated due to their hearing loss. In addition, the students may be more insecure and withdrawn than those without the disease.

A study by Kaplan, Fleshman, Bender, Baum and Clark (1973) provided evidence for the foregoing conclusions. They administered subtests of the Wechsler Intelligence Scale for Children (WISC) to 380 Eskimo students. Comparisons between those who had suffered otitis media before age two and those with no history of the disease revealed some important findings. Students with otitis media obtained significantly lower verbal scores, although performance scores were not affected. In addition, students with a history of ear disease were farther behind academically, and continued to lag behind with each academic year.

The statistics on visual problems among school-age Indians are also distressing. Figures from 1975 revealed that

> an average of 51 percent of school-aged Native American children had some visual problems, compared to 20.9 percent of their white counterparts. Examination and treatment referral for Native American children with myopia were almost four times as frequent as those for white children; 39 percent of Native American children were referred for astigmatism, compared with 1.5 percent of white children. Conjunctivitis in the general Native American population, trauchoma among Southwest Indians, and glaucoma among Alaskan Natives were found to be prevalent by the American Optometric Association and IHS surveys. However, little or no eye care was received by 60 percent of the Native American children and 90 percent of the Native American adults surveyed. (Bank Street College of Education 1976, p. 47)

Together with possible auditory handicaps, these visual defects may hinder the educational process.

In addition to middle ear infections and visual problems, Indian children are also apt to suffer from strep throat, pneumonia and other upper respiratory infections, and diarrhea and other gastrointestinal problems. According to Hendrickson (1981b), these illnesses are still prevalent in Indian communities, and are particularly severe on Indian children.

Another hindrance to education may be due to inferior nutrition. Witt (1980) spoke of the fact that Indian diet has changed as a result of contact with whites. Some foods now seen as traditional, such as fry bread, were actually introduced through European contact (Hendrickson 1981c; Witt 1980). Today, so-called "junk foods", i.e. foods with improper nutritional content, predominate in many Indian homes. Students are apt to consume a large quantity of sweets and sodas (Bank Street College of Education 1976).

The schools can play an instrumental role in dealing with these and other Indian health problems. Among those suggestions offered by the Bank Street College of Education report (1976) are: Community Health representatives for transportation of children to clinics; full-time school nurses; a good nutritional program, possibly including breakfast as well as lunch; and a close liason with Indian Health Service (IHS) physicians. Routine screenings could be conducted in

the schools to evaluate hearing, eyesight, and condition of the teeth.

Another useful thing which the schools might provide is health education. This role of the schools may be best subsumed under the next heading: curriculum.

Curriculum

Many educators have recognized that Indian curriculum needs may be somewhat different from the needs of white middle-class students. However, Garcia (1978) believed that all schools should provide a multiethnic education, in order to prepare students to live in a multiethnic society. He noted that the schools may accomplish this objective by using three approaches: ethnic studies, intergroup relations, and human rights.

The need for Indian studies courses at the high school level has been supported throughout the literature. The rationale for these studies may include using the students' background to further learning (Crawford, Peterson & Wurr 1967), or demonstrating respect for the students' identity and helping them to achieve self-respect (Cottrell 1971; Hadlock 1973; New 1970). Specific Indian studies courses should include local and general Indian history, culture, and current affairs. Where there are many Indian students from one tribe, the tribal language might be offered (Bass 1971).

In addition to specific courses, Indian studies may be integrated into regular course offerings. For example, social studies courses might include units on American Indians (Bass 1971); art classes might include traditional and contemporary Indian painting, basketmaking, and other art forms (Hadlock 1973; Kramer 1935); physical education courses might teach non-sacred tribal dances and games (Hadlock 1973). Resources for the classroom teacher include Schneider's (1972) Contemporary Indian Crafts, Mason's (1946) The Book of Indian Crafts and Costumes, and MacFarlan's (1966) Living Like Indians: A Treasury of American Indian Crafts, Games and Activities.

Some teachers may be hesitant to teach Indian studies, fearing that such courses may increase the alienation between Indian students and the non-Indian world. However, Rollins (1973) found that ethnic identification and involvement was not related to rejection of other social groups. He studied 120 female undergraduate students from seven ethnic groups, using a ethnic background card sort task and a social distance scale. He concluded that "a high degree of ethnic identification can exist apart from a desire to isolate oneself from other ethnic groups or to think ill of them" (Rollins 1973, p. 231).

In addition to Indian studies, Indian students need exposure to other cultures. Laroque (1975) noted two pitfalls in education: the tendency either to overemphasize cultural

differences at the expense of excluding similarities, or to universalize mankind at the expense of recognizing identity and diversity. Through the study of other cultures, Indian students may be enabled to make comparisons and to find similarities, as well as their own uniqueness (Owens 1967). They will also be better equipped to live with other races (Crawford, Peterson & Wurr 1967). The study of other ethnic minorities may serve as an indirect means to discuss "manifestations of low self-esteem such as drugs, suicide, misdirected anger, and random violence" (Hadlock 1973, p. 9).

It is also important for Indian students to study white middle-class families and their lifestyles, including their problems (Hadlock 1973; Wax, Wax & Dumont 1964). Indian students need to know what middle-class members think, and how they relate to the Indian world. Teaching in this area must be direct, so that Indian students will be better prepared to deal with the middle-class world (Davis & Pyatskowit 1976).

Kehoe (1975) suggested one direct way to teach about differences between Indian and white values, and to foster empathy. Although he was writing primarily for history teachers of white middle-class students, the exercise he presented might be applied with equal success to Indian students. He prepared a series of questions, such as, "What should be my relationship to the environment?" He then divided the class into three groups. One group received cards

stating traditional Indian answers to the questions; one group received middle-class white answers, and the third group received the questions. The two groups representing Indian and white values were not told which group they represented, but they were told to role play their respective potitions. During the exercise, the group with the questions decided which group they wished to join. Kehoe noted that, from his subjective analysis, the excercise had been successful with white eighth through eleventh graders. The students usually accepted and rejected aspects of both cultures; they were reportedly highly enthusiastic about the learning experience.

Evvard (1966) presented a more indirect way that an intensive study of middle-class white culture might be accomplished. She proposed using textbooks as a point of departure for a discussion of value differences. This approach calls for the teachers' awareness of white values, and their ability to detect subtle reflections of these values as they occur in textbooks. Evvard and Mitchell (1966) demonstrated how this might be done, using the stories of Sally, Dick and Jane from the New Basic Readers. For instance, they explained how the Navajo children whom they taught were bewildered by the concept of pets who were allowed in the house. Navajo children also could not understand that the children in the stories played with teddy bears: for the Navajo, the bear is reverenced. These authors suggested that the values

of whites and Indians could be openly compared using these stories. Not only would students have a better understanding of white culture, but they could choose to acculturate if presented with an alternative.

A textbook written for the purpose of teaching acculturation skills is Modern Indian Psychology, by John F. Bryde (1971). This textbook, which was written primarily for Sioux students, includes a brief history of the Sioux Indians. A general history of Indians is also presented. However, the major focus of the book is an exploration of Indian and white values. Suggestions on ways to use Indian values in adjusting to the white world are presented.

Aroostoock Indian Education (1975) has also designed a course for instruction at the secondary level. The course focuses on Northeast Woodland Indian history and culture, both past and present. Simulated classroom experiences are presented as a means to provide understanding in race relations and prejudice. A bibliography of suggested materials is included. Vantine (1976) provided a curriculum guide for the study of Indian values, and their comparison with white values. The course, designed to teach American Indian history, includes objectives, activities, and teaching aids. Burger's (1968) Manual in Cultural Sensitivity is another resource, providing a method for the application of cultural anthropology in the classroom. This manual was specifically designed for cross-cultural education. Project Paiute

(1976) has also provided a guide which offers direction for teaching about Indian history, art, government, and literature. Other curriculum guides and suggested readings may be found in Stensland (1979), who has written an extensive annotated bibliography on American Indian literature. Although written for the English teacher, other teachers might find this book useful in preparing their curriculum.

Many existing textbooks may be inadequate for student needs, and may need supplementation with outside materials. In addition, textbooks may contain inaccuracies, biases, stereotypes, and misrepresentations relative to Indian people, and should be carefully screened prior to useage (Bass 1971; Hendrickson 1981a; MacLean 1972).

To illustrate the inadequacies of existing textbooks, a report by Coburn (1979) might be cited. He reported on the work of a special committee that had been established by the state of Oregon in 1978. This committee consisted of representatives from Indian communities in Oregon, whose task was to review history textbooks for selection purposes. A total of 29 textbooks were reviewed, which had been written for fourth through twelfth graders. Reviewing criteria included such things as data accuracy and the inclusion of Indian culture, Indian history, and Indian contributions to the United States. Only six texts were considered acceptable as written. Three others were judged to be acceptable if supplemented; all others were rejected.

Another important curriculum area which is sometimes overlooked is health education. As previously noted, Indians are among the least healthy of all cultural groups. The schools might provide education relating to care of the eyes, ears and teeth, and regarding proper nutrition.

In addition, information on alcoholism and drug abuse might be presented. The need for such education has been demonstrated by authors such Hendrickson (1981b) and Shore (1974). Hendrickson (1981b) defined alcoholism as the most serious problem on reservations. Shore (1974) noted that by the age of fifteen, most Indian adolescents have tried drinking, and some adolescents drank regularly. Alcohol-related accidents are predominant in Indian communities, and death from cirrhosis of the liver is four times greater for adult Indians than for adult non-Indians (May & Dizmang 1974).

Finally, there is a tremendous need for career education and vocational training. The goal of this educational instruction is to teach skills which will lead to economic independence (Aller 1967; Beatty 1936; Fuchs 1970; Hobart 1963; Wax 1963). The fact that 1970 employment figures for Native American males was set at 53%, as compared with 73.7% for white males, indicates the need for such training (Anderson & Cottingham 1981).

Existing vocational programs may need updating:

> When vocational training is offered, it has often been regarded as inadequate. People are trained on equipment that is obsolete, and for jobs that

> do not exist. Furthermore, vocational training is often given for the lowest level of skill so that even where there are opportunities to use the skill, the graduate qualified for only the lowest paying jobs . . . Wayne Ducheneau, Governor of the Cheyenne River Sioux, said that they had had lots of training programs; the reservation had many welders and carpenters, but there were no jobs for them. (Bank Street College of Education 1976, pp. 29, 31)

Of course, the school system is not in a position to accurately predict the jobs of the future. However, school administrators and teachers might pay attention to current job trends, and teach skills leading towards functioning in these jobs. Career exploration might include exercises similar to those provided in the book, What Color is Your Parachute? by Bolles (1982). This book also provides some direction in determining job trends, and some suggestions relating to finding a job.

This subsection has stressed the need for curriculum inclusion of multiethnic education, especially Indian studies; health education; career education, and vocaticnal training. In order to provide such education, sensitive and creative staff members are required. The next subsection will address this issue.

Teachers and Administrators for Indian Students

In future years, there will be a need for a greater number of educators who can work with Indian children. This is due to the fact that Indians are the fastest-growing ethnic group in the country. In 1970, the Indian population was two times whiat it had been forty years earlier. Indian school children numbered around 150,000 (Havighurst 1970a).

It has been noted throughout the literature that more Indian educators are needed to teach Indian students. Indian teachers can provide valuable role models, helping to give Indian students a feeling of belonging and instilling pride through identification (Bass 1971; Sullivan 1979). Krause, Ziegler and Havighurst (1970) noted that Indian teachers have greater knowledge of the communities where they teach, and have more contact with those communities. In addition, they tend to have more positive attitudes towards Indians. Bass (1971) noted that Indian teachers can help non-Indian teachers to better understand their pupils. The inclusion of Indian teachers does not necessitate the exclusion of non-Indian teachers, both of whom are necessary for multi-ethnic education.

Krause, Ziegler and Havighurst (1970) estimated that around 6,500 teachers are working in classrooms with a majority of Indian students. They surveyed teachers in 39 school systems, who were involved in teaching from a low to a high percentage of Indian children. A total of 600 teach-

ers were surveyed, and 345 teachers were personally interviewed. In particular, these authors wanted to know the teachers' attitudes towards Indian people and culture, towards teaching Indian students, and towards the school climate. The survey results yielded the following conclusions:

> In general, the research evidence supports very strongly the proposition that teachers in schools with a preponderance of Indian pupils are fairly competent people, well-disposed towards Indians in general, middle-of-the-road on policy about assimilation of Indians with White culture and on the authoritarian-permissive dimension of classroom management. (Krause, Ziegler & Havighurst 1970, p. 22)

However, there have been numerous criticisms which maintain that educators need to know more about their Indian students. Educators have been urged to examine their own value systems, so that they can recognize how they may be unconsciously presenting their values to their students (Evvard 1966). They have also been urged to examine their attitudes towards Indians, and towards lower socioeconomic groups (Crawford, Peterson & Wurr 1967).

Most educators do not intentionally discriminate against Indian students. However, their attitudes and value systems generally reflect the majority culture because this is where they have been reared. Few have had concentrated exposure to minority groups and those from lower socioeconomic levels (Garcia 1978).

It has been stated that the major problem of educators of Indian students is their failure to recognize Indians as be-

longing to a unique culture (MacLean 1972). As Fuchs (1970, p. 13) stated,

> Attention to the Indian presence is valuable in creating a positive learning environment. Too often, educators, believing themselves demoncratic, prefer to view all children as like. Children differ not only as individuals, but as members of different social groups. Respectful recognition of their identity as Indians will help open the way to a search for better communication between teachers and pupils.

Educators themselves may need education in Indian history and in Indian culture, both past and present. Appendix F presents some reference materials which might be useful for the teacher of North Dakota Indian students. The materials listed contain a variety of biases, and are not uniformly accurate in presenting Indian issues. However, they may be useful in providing the teacher of North Dakota Indians with some knowledge of the different ways in which these tribal groups have been viewed.

Educators who have learned about Indian heritage have been instructed not not to confuse this heritage with present Indian culture. They have also beeninstructed to recognize that culture is more than just a packet of tangibles. The immaterial world of the Indian, in terms of value systems, religious philosophy, and beliefs, is as important as the material trappings of the culture (Laroque 1975).

New teachers might profit from team teaching with an experienced teacher. This apprenticeship model would focus on learning skills helpful in working with Indian children

(Wax, Wax & Dumont 1964). Orientation sessions for the new teacher, as well as inservice programs, seminars and workshops for all teachers, have been recommended (Bass 1971; Little & Little 1978; Owens 1967; Wilson & Black 1978).

One workshop which yielded statistically positive results was conducted by the Indian Studies Institute, and reported by Evans and Husband (1975). This two-week workshop took place in Sioux City, Iowa in 1973. The content included an introduction to Indian history and culture, value differences as they might become evident in the classroom, and teaching techniques which might be used with Indian students. At the close of the training period, the eighteen participating teachers were compared with thirty-five colleagues who had not attended the workshop. Predictably, the Institute participants scored significantly higher on a test measuring knowledge of problems in Indian affairs. They also rated MY CONCEPT OF INDIAN STUDENTS more favorably on a semantic differential. The authors concluded that the teachers developed more positive attitudes towards Indian students. However, this conclusion may not be justified, since there may have been a selection factor operating among the participants. Those who chose to participate may have had more favorable pre-workshop attitudes towards Indians, which influenced their workshop attendance. Nevertheless, the conclusion that teachers learned more about current issues regarding Indians through course content may be accurate.

In addition to formal education, such as workshops may provide, educators might attempt to learn about their students through more informal methods. Roessel (1971) presented some suggestions for educators which may be applicable. He stated that educators might visit different reservations, including those where a majority of their students have lived. If educators work on or near a reservation, they might talk to people who know something about the reservation and its land. Reports and books on reservation economy, politics, housing, and arts and crafts may be informative. Educators might also become familiar with the foods which students eat at home, including so-called traditional foods.

There have been some general articles written on the best attitude to use when dealing with minority group students. Friedenberg (1963, p. 499) addressed the problem of lower socioeconomic dropouts in the following selection.

> To reach the dropouts and give them a reason for staying, the school will have to start by accepting their raison d'etre. It would have to take lower-class life seriously as a condition and as a pattern of experience - not just as a contemptible and humiliating set of circumstances that every decent boy or girl is anxious to escape from. It would have to accept their language, their dress, and their values as a point of departure for disciplined exploration, to be understood, not as a trick for luring them into the middle class, but as a way of helping them to explore the meaning of their own lives. This is the way to encourage and nurture potentialities from <u>whatever</u> social class.

Friedenberg pointed out that both educators and students may see the students' lives as being composed of fear and depri-

vation. However, she stated that educators do not have the right to force their own lifestyles onto the students. There may be other viable alternatives; students might be encouraged to explore all that are acceptable to them.

Regarding attitudes towards Indians, educators have also been encouraged to acculturate. In this process, Miller and Garcia (1974) warned against three false images of Indians: the savage, the child, and the noble of the forest (Miller & Garcia 1974). The first two images are derogatory, and the third image is romanticized. Rather, educators have been encouraged to recognize those things in Indian cultures, including their values, which might be important for adjustment to a future world (Archibald 1970; Cooley 1977; Fuchs 1970).

In their own acculturation efforts, teachers have been urged to rid themselves of the once-popular notion of cultural deprivation. As Boozer (1978, p. 414) remarked,

> the use of labels such as "culturally disadvantaged," "culturally deprived", and "educationally deprived" to designate minority groups is value-laden . . . the extent to which a group or subgroup is handicapped may be only in the "eye of the beholder."

Wax, Wax and Dumont (1964, pp. 69-70) also reacted negatively against themes of cultural deprivation, terming it a "Vacuum Ideology." They stated that the teachers of Sioux students at Pine Ridge Indian Reservation should realize that

> Sioux parents do buy toys for their children (insofar as they have the money), they do tell them

> stories and teach them songs, they take them on excursions, and they answer their questions - astonishing! . . . urban middle-class children have more knowledge of jet planes, rocket ships, and hydrogen bombs, but in fairness (teachers) ought to realize that Sioux children have more experience with horses, cattle, and the life of the prairie. In all, it is dubious whether any aspect of the background of this "usual" child would truly have any bearing on his scholastic abilities, except that he would be more congenial to the teacher because he shared more of the same culture.

Cole and Bruner (1971) asserted that differences in performance may be accounted for by the situations and contexts in which the competence is expressed. They stated that, given the proper situation, so-called "culturally deprived" students will be able to perform in an equal or superior manner to majority culture students.

Other articles on attitudes have urged teachers to avoid a negative self-fulfilling prophecy in dealing with Indian students. Authors such as Sullivan (1979) and Wilson and Black (1978) noted that the teacher who expects students to perform poorly will produce poor achievers. Instead, the teacher should be aware that, given the right conditions, all students will learn. The next section will address some teaching methods which might be employed to further such learning.

Teaching Methods for Indian Students

Throughout the literature, teachers of Indian students have been challenged to modify teaching techniques so that their pupils will be better able to learn. An earlier section reviewed some specific suggestions which have been made. To reiterate, teachers were encouraged to abandon timed tests and to use immediate rewards. Group motivation and reinforcement methods were recommended, and procedures whereby Indian students could teach each other were encouraged. It was noted that certain behaviors might be viewed in a cultural context. Instead of disciplinary action, these behaviors appear to merit respect and understanding.

It was also suggested that Indian students might respond better to methods emphasizing cooperation with their fellow classmates, rather than competetion with them. Aronson, Bridgeman and Geffner (1978) believed that all students might benefit from a cooperative classroom environment:

> In a cooperative interaction, the emphasis is on all participants working together to accomplish a mutual goal. The production of "losers" is virtually eliminated in this environment. Thus, under these circumstances it is likely that the students will experience greater success as well as an increase in support from their classmates. As these phenomena occur, they will almost certainly produce an increase in self-esteem. Again, this occurs as a function of the positive feedback received from group members, and the skills and abilities gained by the members when they help teach their classmates. (Aronson, Bridgeman & Geffner 1978, p. 16)

Misiaszek (1969) discussed a special aptitude that the Indian student may possess. The creative teacher may use this aptitude to further educational achievement:

> Traditionally, there is not a great deal of verbalizing in the Indian home, and as a result, the child will develop his ability to perceive meanings that underlie facial expressions, gestures, or tone of voice. Programs that relate to perceptive ability often promote successful achievement more rapidly than do the academically oriented subjects. (Misiaszek 1969, p. 446)

Cazden and John (1971) reviewed the empirical literature on intelligence testing of Indians, and formulated a similar conclusion:

> their style of learning is more visual than verbal, more learning by looking than learning through languages. Learning by looking may be reflected in several different performances: relative superiority on tests of visual abilities, skill in interpreting photographs, proficiency in spelling, culturally developed forms of visual art that are tapped by the Draw-A-Man (DAM) test, and learning by imitation. (Cazden & John 1971, p. 256)

These authors recommended changing instructional methods to include more manual manipulation and demonstrations, and to capitalize on visual superiority.

Within school systems, tracking and ability grouping have met with criticism (Garcia 1978). If schools contain multiethnic populations, these methods tend to isolate students along cultural, racial, and/or socioeconomic lines. In addition, minority students are apt to be labeled as slow learners, since they may not be as academically advanced as their white peers. This label may lead to negative academic self-evaluation, a further hindrance to scholastic achievement.

Finally, Bass (1971) remarked that Indian children are typically allowed more autonomy at home than the average white child. Because of this, they may be apt to rebel if classroom rules are too rigid. Their rebellion usually takes the form of apathy and non-involvement. Thus, teachers need to assess the necessity of classroom rules, and to foresake those that are not necessary. Teachers also might allow for a greater number of autonomous learning experiences. For example, students might help to set the curriculum.

This subsection has reviewed some teaching methods which the teacher of Indian students might employ. Many of these methods have arisen from an assessment of Indian students' family lives. The next subsection will present some suggestions for the inclusion of parents and community members in the learning process.

The School and the Community

It is a common assumption that students will place a greater value on their education if their parents value that education. Unfortunately, Indian parents and community members may not value the education which the schools are providing. Wax (1963) asserted that Indian parents often see the school systems as inculcating alien values. As a result, negative parental attitudes are engendered. In turn, these attitudes interfere with their children's ability to succeed in school.

To counteract negative parental attitudes, teachers might attempt to elicit greater parental involvement. Parents and community members can be enlisted in the effort to bring Indian values into the schools. Students could be encouraged to talk with their relatives about the past, and about their own experiences in growing up (Little & Little 1978). The knowledge which the students gain could be shared in Indian studies and history courses. Myths and legends elicited from parents and grandparents could serve as material for English courses (Hadlock 1973). In these ways, community members might feel that their traditions and values are respected, and are being used within the schools to further education.

Community members could also be utilized as aides, resource people, consultants, and volunteers (Hadlock 1973; Little & Little 1978). Within the schools, aides and volunteers might serve the same function as the Indian teacher: to help the non-Indian teacher understand the pupils. They might also share traditional skills, such as Indian arts or storytelling (Hadlock 1973).

Resource people from the community might be brought into the schools to revive lost Indian arts. In 1931, McKittrick noted that many parents and their children no longer practiced traditional arts such as basketweaving, beadwork and textile weaving. The teachers could not teach these arts, as they also did not know them. In order to provide in-

struction in these arts, it was necessary to enlist the aid of older community members. To accomplish this objective, it was essential for school personnel to increase their knowledge of the Indian community.

One way in which teachers might learn about the Indian community is to ask students which community members they most respect and admire. These members could then be invited into the schools for assemblies and classes (Bass 1971; Crawford, Peterson & Wurr 1967). Tribal government leaders could also be invited into the schools to provide knowledge about government workings (Little & Little 1978).

The inclusion of Indian leaders in the schools may help to provide Indian students with valuable role models. A more formalized attempt to achieve this objective was undertaken by Jerde (1970). He sent out over 100 questionnaires to successful Indian men and women. From the 28 obtained responses, he prepared a publication for distribution to Indian elementary students. The format, described as similar to a "Weekly Reader", was designed to favorably influence Indian students regarding vocational selection.

Field trips into the community might also be arranged (Hadlock 1973). The present author's experiences on the Red Lake Chippewa Reservation may be used to illustrate this point. Students and teachers regularly toured the Indian-owned fishery and lumber mill. They also visited the court system, including various rehabilitation programs. Local

artisans were contacted, and classes were invited to watch such traditional activities as canoe-making and maple syruping. The tribal museum served as another field trip site. All of these field trips served to stimulate educational activities within the classroom.

Parent-teacher conferences and parent attendance at special programs were noted by Bass (1971) as excellent ways to establish rapport between Indian parents and teachers. In addition, teachers might consider the possibility of home visits. They might also attend ceremonials and gatherings in the community (Wax, Wax & Dumont 1964).

Many teachers do not attend such gatherings because they do not feel as if they have been invited, and they fear being intrusive (Reid & Sparks 1976). However, many gatherings do not require invitations: they are open to all who choose to participate. Teacher attendance may be a means to make a strong positive statement regarding respect for the community and its values.

Finally, the movement towards Indian self-determination in education might be actively encouraged by the school system as a whole. Indian parents and community members now serve as members of many school boards, and they also comprise advisory committees (Little & Little 1978). By being able to provide direction in educational policies, curriculum, teacher selection and training, and other aspects of school functioning, they are more apt to feel as if the schools exist for the Indian community.

This subsection has presented ways in which the schools might establish better rapport with Indian communities. It has been asserted that Indian student achievement may be furthered if good rapport is established.

Appendix A

Personal Data Form: Students

THE FOLLOWING INFORMATION WILL BE USED ONLY FOR RESEARCH PURPOSES. YOUR RESPONSES WILL BE HELD IN COMPLETE CONFIDENTIALITY. INDIVIDUAL RESPONSES WILL NOT BE REVEALED.

Name_____ Sex_____

Age_____ School_____

Grade_____

1. Where were you born?_____
2. Do you live on an Indian reservation? _____yes _____no
3. How many years have you lived on a reservation?_____

   How many years have you lived off a reservation?_____

   (This should add up to your age)
4. How many different reservations have you lived on for a year or more?_____

   How many different reservations have you visited?_____
5. Are you an Indian? _____yes _____no

   If yes: What tribe do you belong to?

   _____

   Are you formally enrolled? _____yes _____no

What tribe does your mother belong to?

_____

What tribe does your father belong to?

_____

What is your percentage of Indian blood?

_____

6. About how many hours per day do you spend watching television? _____

7. Place a check mark (x) next to those school activities which you were in during the last (1980-1981) school year.

1.___basketball	18.___drama club
2.___football	19.___Future Homemakers
3.___baseball	20.___library club
4.___volleyball	21.___science club
5.___wrestling	22.___Minne Cep or NYC
6.___track	23.___audiovisual club
7.___tennis	24.___homecoming royalty
8.___cheerleading	25.___debate
9.___drill team	26.___Future Teachers
10.___art club	27.___sports spectator
11.___math club	28.___student council
12.___band	29.___lettermen's (women's)
13.___annual staff	30.___school newspaper
14.___pep club	31._____
15.___school plays	32._____
16.___class officer	33._____

17.___chorus 33._____

8. Do you have a job outside school? _____yes _____no

If yes, where do you work?

_____

9. Place a check mark (x) next to those outside activities which you spent alot of time doing outside of school, during the past year:

1._____snowmobiling
2._____pool/foosball
3._____motorcycling
4._____berry picking
5._____cooking
6._____cross-country skiing
7._____softball
8._____fishing
9._____working on vehicles
10._____wild ricing
11._____walking around
12._____swimming
13._____driving around
14._____trout fishing
15._____just talking to people
16._____ice fishing/spearing
17._____beadwork
18._____hunting
19._____
20._____

10. How often do you go to pow wows?

_____often--both on and off reservation

_____frequently

_____seldom--only 1 or 2 in the past year

_____never

11. Do you attend pow wows with other members of your family? _____yes _____no

12. Do you dance at pow wows? _____yes _____no

Do you drum or sing? _____yes _____no

13. How often have you attended give-away feasts in the last year?

_____often--more than 5

_____frequently

_____seldom--only 1 or 2 in the past year

_____never

14. How often do you eat traditional Indian foods? (e.g. fry bread)

_____often

_____fairly often

_____seldom -- only 1 or 2 times in the past year

_____never

15. How many brothers and sisters do you have?_____

How many people live at your house?_____

16. Do you know any Indian language? _____yes _____no

If so, which one?_____

Rate your knowledge of this language:

_____none--only speak English

_____know some words

_____can speak it a little

_____can speak it well

17. Do you have any children? _____yes _____no If so, how many?_____

18. How do you feel about completing high school?

_____very important that I graduate

_____important that I graduate

_____do not care whether or not I graduate

_____do not intend to graduate; plan to drop out

19. What do you plan to do after high school?

(Check all that apply to you)

_____go to college or technical school

_____raise a family

_____join the Armed Forces

_____get a job

_____do not know

_____Other (List):_____

20. Are you a member of a church? _____yes _____no

If yes, which one?_____

21. How many different schools have you attended? (do not count kindergarten or preschool) _____

How many of these schools were on a reservation?

_____

22. Have you ever attended a boarding school? _____yes

_____no

If so, for how many years? _____

23. Have you ever lived with foster parents? _____yes

_____no

If so, for how many years? _____ Are you currently living in a foster home? _____yes _____no

24. Have you ever lived with white foster parents?

_____yes _____no

Appendix B

Personal Data Form: Teachers

THE FOLLOWING INFORMATION WILL BE USED ONLY FOR RESEARCH PURPOSES. YOUR RESPONSES WILL BE HELD IN COMPLETE CONFIDENTIALITY. INDIVIDUAL RESPONSES WILL NOT BE REVEALED.

Name_____ Sex_____

Age_____ School_____

Grade(s)_____ Subject(s)_____

1. How many years have you taught at this school?_____
2. Have you taught elsewhere? _____yes _____no
   If so, in how many other schools have you taught?_____
   How many of these schools have been on a reservation?_____
3. How many years have you taught? (exclude student teaching experience)_____
4. How many years have you taught Indian children?_____
5. Do you live on an Indian reservation?_____
6. How many years have you lived on a reservation?_____

How many years have you lived off a reservation?_____

(This should add up to your age)

7. How many different reservations have you lived on for a year or more?_____

   How many different reservations have you visited?_____

8. Are you an Indian? _____yes _____no

   If yes:

   What tribe do you belong to?_____

   Are you formally enrolled?_____

   What is your percentage of Indian blood?_____

9. Are you married? _____yes _____no

   Do you have children? _____yes _____no

   If so, how many?_____

10. Where did you attend high school?_____

11. Place a check mark (x) next to those activities which you sponsored during the last (1980-1981) school year.

1.___basketball	15.___class sponsor
2.___football	16.___chorus
3.___baseball	17.___drama club
4.___volleyball	18.___Future Homemakers
5.___wrestling	19.___library
6.___track	20.___science club
7.___tennis	21.___audiovisual club

8.___cheerleading
9.___drill team
10.___art club
11.___band
12.___annual
13.___pep club
14._____school plays (director)
22.___debate team
23.___Future Teachers
24.___student council
25.___math club
26.___lettermen's (women's)
27.___school newspaper

12. How often during the last (1980-1981) school year did you attend school sports events?

_____often
_____frequently
_____seldom--only 1 or 2 in the past year
_____never

13. How often do you go to pow wows?

_____often
_____frequently
_____seldom--only 1 or 2 in the past year
_____never

14. How often have you attended give-away feasts in the last year?

_____often--more than 5
_____frequently
_____seldom
_____never

15. How often do you eat traditional Indian foods? (e.g. fry bread)

_____often

_____frequently

_____seldom--only 1 or 2 times in the past year

_____never

16. Do you know any Indian language? _____yes _____no

If so, which one?_____

Rate your knowledge of this language:

_____none--only speak English

_____know some words

_____can speak it a little

_____can speak it well

17. Rate your satisfaction with your current job:

___very happy ___happy ___neutral ___unhappy

___very unhappy

Comments:_____

_____

_____

_____

_____

_____

Appendix C

Self-esteem and Value Differential

Semantic Differential Directions

We want to know how you feel about various things. Beneath the name of each thing, you will find several scales of opposite words. Locate the thing where you think it belongs on each scale.

For example: suppose we wanted to know how you feel about an animal, such as a dog. Beneath the word dog, the first scale might be good-bad:

good 3 2 1 0 1 2 3 bad

If you think a dog is very good, mark a cross (x) over the first number on the left, number "3". Or if you think a dog is fairly good, mark a cross over the second number, which is a "2". If you think a dog is somewhat good, mark an x on the third number, number "1". If you think a dog is neither good or bad, mark a cross over the "0". If you think a dog is somewhat bad, fairly bad or very bad, mark a cross over the proper number on the other side of the scale. You might mark your sheet like this:

good 3 2 1 0 1 2 3 bad

worthless 3 2 1 0 1 2 3 valuable

This would mean that you think a dog is fairly good and fairly valuable.

Mark only one number for each set of words. Work as fast as you can, and don't go back and change a mark after you have made it. We are interested in your first impressions and your real feelings.

Before you begin, please look at the pairs of opposite words listed below, which you will be using. Listen while I read them aloud.

1. risky - cautious
2. cruel - kind
3. brave - cowardly
4. worthless - valuable
5. bad - good
6. dependent - independent
7. beautiful - ugly
8. dumb - smart
9. competitive - cooperative
10. sad - happy
11. tense - relaxed
12. giving - taking

Semantic Differential

THE AVERAGE INDIAN

risky	3	2	1	0	1	2	3	cautious
cruel	3	2	1	0	1	2	3	kind
brave	3	2	1	0	1	2	3	cowardly
worthless	3	2	1	0	1	2	3	valuable
bad	3	2	1	0	1	2	3	good
dependent	3	2	1	0	1	2	3	independent
beautiful	3	2	1	0	1	2	3	ugly
dumb	3	2	1	0	1	2	3	smart
competitive	3	2	1	0	1	2	3	cooperative
sad	3	2	1	0	1	2	3	happy
tense	3	2	1	0	1	2	3	relaxed
giving	3	2	1	0	1	2	3	taking

THE AVERAGE WHITE PERSON

risky	3	2	1	0	1	2	3	cautious
cruel	3	2	1	0	1	2	3	kind
brave	3	2	1	0	1	2	3	cowardly
worthless	3	2	1	0	1	2	3	valuable
bad	3	2	1	0	1	2	3	good
dependent	3	2	1	0	1	2	3	independent
beautiful	3	2	1	0	1	2	3	ugly
dumb	3	2	1	0	1	2	3	smart
competitive	3	2	1	0	1	2	3	cooperative
sad	3	2	1	0	1	2	3	happy
tense	3	2	1	0	1	2	3	relaxed
giving	3	2	1	0	1	2	3	taking

TEACHERS AT THIS SCHOOL

risky	3	2	1	0	1	2	3	cautious
cruel	3	2	1	0	1	2	3	kind
brave	3	2	1	0	1	2	3	cowardly
worthless	3	2	1	0	1	2	3	valuable
bad	3	2	1	0	1	2	3	good
dependent	3	2	1	0	1	2	3	independent
beautiful	3	2	1	0	1	2	3	ugly
dumb	3	2	1	0	1	2	3	smart
competitive	3	2	1	0	1	2	3	cooperative
sad	3	2	1	0	1	2	3	happy
tense	3	2	1	0	1	2	3	relaxed
giving	3	2	1	0	1	2	3	taking

STUDENTS AT THIS SCHOOL

risky	3	2	1	0	1	2	3	cautious
cruel	3	2	1	0	1	2	3	kind
brave	3	2	1	0	1	2	3	cowardly
worthless	3	2	1	0	1	2	3	valuable
bad	3	2	1	0	1	2	3	good
dependent	3	2	1	0	1	2	3	independent
beautiful	3	2	1	0	1	2	3	ugly
dumb	3	2	1	0	1	2	3	smart
competitive	3	2	1	0	1	2	3	cooperative
sad	3	2	1	0	1	2	3	happy
tense	3	2	1	0	1	2	3	relaxed
giving	3	2	1	0	1	2	3	taking

MYSELF

risky	3	2	1	0	1	2	3	cautious
cruel	3	2	1	0	1	2	3	kind
brave	3	2	1	0	1	2	3	cowardly
worthless	3	2	1	0	1	2	3	valuable
bad	3	2	1	0	1	2	3	good
dependent	3	2	1	0	1	2	3	independent
beautiful	3	2	1	0	1	2	3	ugly
dumb	3	2	1	0	1	2	3	smart
competitive	3	2	1	0	1	2	3	cooperative
sad	3	2	1	0	1	2	3	happy
tense	3	2	1	0	1	2	3	relaxed
giving	3	2	1	0	1	2	3	taking

THE KIND OF PERSON I WOULD LIKE TO BE

risky	3	2	1	0	1	2	3	cautious
cruel	3	2	1	0	1	2	3	kind
brave	3	2	1	0	1	2	3	cowardly
worthless	3	2	1	0	1	2	3	valuable
bad	3	2	1	0	1	2	3	good
dependent	3	2	1	0	1	2	3	independent
beautiful	3	2	1	0	1	2	3	ugly
dumb	3	2	1	0	1	2	3	smart
competitive	3	2	1	0	1	2	3	cooperative
sad	3	2	1	0	1	2	3	happy
tense	3	2	1	0	1	2	3	relaxed
giving	3	2	1	0	1	2	3	taking

Appendix D

Character Valuation Test

Paired Comparisons: Directions

We want to know what you think about some traits that a person might have. You are asked to compare two traits at a time, and indicate on a scale which of the two traits is the most important for a person to have. You are only asked to indicate what you consider to be important, not whether or not you have the trait yourself.

For example, say we wanted to know whether you thought it was more important for a person to be happy or rich. The two words would be listed on a scale, thus:

happy 3 2 1 0 1 2 3 rich

If you thought it was very important to be happy but not at all important to be rich, you would mark the number "3". If you felt it was somewhat more important to be happy than rich, you would mark the number "2". If you felt it was slightly more important to be happy, you would mark the number "1". Marking the number "0" would mean that it was equally important to be happy and to be rich. And the remaining numbers would indicate that you would rather be rich than happy: if you marked the fifth number from the left, "1", you would think that being rich is slightly more impor-

tant than being happy. The sixth number, which is numbered "2", would be marked if you thought that being rich is somewhat more important than being happy. Finally, the last number would be marked if you thought being rich is very much more important than being happy.

Mark only one number for each set of words. Work as fast as you can, and don't go back and change a mark after you have made it. We are interested in your first impressions and your real feelings.

Before you begin, please look at the words that you will be asked to compare, and listen while I read them aloud and define them.

1. generous--a person who is generous shares things with others.
2. independent--a person who is independent can do things without help.
3. athletic--a person who is athletic is good at sports.
4. logical--a person who is logical thinks in an orderly manner.
5. important--a person who is important is a somebody.
6. intelligent--a person who is intelligent is smart.
7. attractive--a person who is attractive is good-looking.
8. cheerful--a person who is cheerful is pleasant and bright.

9. dependable--a person who is dependable can be trusted.
10. understanding--a person who is understanding is sympathetic.
11. popular--a person who is popular is well-liked by others.
12. honest--a person who is honest is truthful.

Would you rather be:

attractive	3	2	1	0	1	2	3	athletic
honest	3	2	1	0	1	2	3	cheerful
cheerful	3	2	1	0	1	2	3	dependable
important	3	2	1	0	1	2	3	independent
popular	3	2	1	0	1	2	3	important
intelligent	3	2	1	0	1	2	3	generous
athletic	3	2	1	0	1	2	3	understanding
dependable	3	2	1	0	1	2	3	attractive
independent	3	2	1	0	1	2	3	honest
generous	3	2	1	0	1	2	3	popular
understanding	3	2	1	0	1	2	3	logical
logical	3	2	1	0	1	2	3	intelligent
dependable	3	2	1	0	1	2	3	important
intelligent	3	2	1	0	1	2	3	understanding
generous	3	2	1	0	1	2	3	intelligent
understanding	3	2	1	0	1	2	3	cheerful
athletic	3	2	1	0	1	2	3	logical
cheerful	3	2	1	0	1	2	3	independent
important	3	2	1	0	1	2	3	attractive
logical	3	2	1	0	1	2	3	dependable
attractive	3	2	1	0	1	2	3	generous
independent	3	2	1	0	1	2	3	honest
honest	3	2	1	0	1	2	3	popular
popular	3	2	1	0	1	2	3	athletic

Appendix E

Rationale for the Present Study: Statement to Teachers

My name is Janet Clark. I am a former elementary school teacher with four years' experience. Two of those years were spent at the Red Lake Indian Reservation, from 1975-1977. Since that time, I have been attending the University of North Dakota, where I am working on my doctorate degree in clinical psychology.

I have proposed a study at your school, which I would like to begin today. The purpose of my study is to provide your school system with systematic and objective information about the high school students and teachers. It is hoped that this information will be of use to you in your efforts to provide quality education for your students. In order to accomplish my objective, it is necessary that I obtain your permission and cooperation.

It is not unusual for teachers to feel suspicious and perhaps a bit apprehensive when asked to participate in a study. Some may even fear that they might be characterized as poor teachers. It is not my objective to evaluate the teachers at your school. The study will not attempt to identify individual strengths and weaknesses, and no data on individuals will be revealed. Instead, I am interested in

looking at the overall educative process at your school, and examining variables which influence academic achievement.

It is also common for teachers to wonder about who will have access to the obtained information, and if they will be identified. I wish to emphasize again that individual responses will not be revealed. The results will be presented in a way that will not allow individual names to be ascertained.

It is not my intent to find either teachers or students as "right" or "wrong", but to focus on gathering some information about people's ideas and perceptions. You will receive feedback concerning the results of the study. A workshop will be conducted in which the results will be disseminated.

Appendix F

Sources for North Dakota Teachers of Indian Students

In the following pages, some reference materials which might be useful to the teachers of North Dakota Indians are listed. All of the materials deal with the tribal groups which are most heavily represented in North Dakota. However, some of the references are about members of the major North Dakota tribes who reside outside of North Dakota. Therefore, it should be kept in mind that even within members of a tribe, there may be differences between those residing in North Dakota and those residing in other locales.

As previously noted, these reference materials contain a variety of biases, and are not uniformly accurate in presenting Indian issues. However, they may help to provide teachers with some knowledge of the different ways in which these tribal groups have been viewed. They may also help to provide teachers with some direction for future explorations of Indian issues.

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